

URBAN DESIGN COMMISSION APPLICATION

UDC

City of Madison
Planning Division
Madison Municipal Building, Suite 017
215 Martin Luther King, Jr. Blvd.
P.O. Box 2985
Madison, WI 53701-2985
(608) 266-4635



FOR OFFICE USE ONLY:

Paid _____ Receipt # _____

Date received _____

Received by _____

Aldermanic District _____

Zoning District _____

Urban Design District _____

Submission reviewed by _____

Legistar # _____

Complete all sections of this application, including the desired meeting date and the action requested.

If you need an interpreter, translator, materials in alternate formats or other accommodations to access these forms, please call the phone number above immediately.

1. Project Information

Address: 2403 E Springs Dr. Madison, WI

Title: 2403 East Springs Drive

2. Application Type (check all that apply) and Requested Date

UDC meeting date requested September 21, 2022

New development

Alteration to an existing or previously-approved development

Informational

Initial approval

Final approval

3. Project Type

Project in an Urban Design District

Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)

Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)

Planned Development (PD)

General Development Plan (GDP)

Specific Implementation Plan (SIP)

Planned Multi-Use Site or Residential Building Complex

Signage

Comprehensive Design Review (CDR)

Signage Variance (i.e. modification of signage height, area, and setback)

Signage Exception

Other

Please specify _____

4. Applicant, Agent, and Property Owner Information

Applicant name Jay Patel

Street address 6251 Joliet Road

Telephone 860-510-2540

Company Hawkeye Hotels

City/State/Zip Countryside, IL 60525

Email jay.patel@hawkeyehotels.com

Project contact person Jill Rubin / Nichte Gonzalez

Street address 1785 Village Center Circle Suite 100

Telephone (702) 403-1575

Company Design-Cell Architecture

City/State/Zip Las Vegas, Nevada 89134

Email jill@design-cell.com / nichte@design-cell.com

Property owner (if not applicant) Badger Lodging LLC

Street address 2706 James Street

Telephone 319-752-7400

City/State/Zip Coralville, IA 52241

Email _____

5. Required Submittal Materials

- ✓ **Application Form**
- ✓ **Letter of Intent**
 - If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required
 - For signage applications, a summary of how the proposed signage is consistent with the applicable CDR or Signage Variance review criteria is required.
- ✓ **Development Plans** (Refer to checklist on Page 4 for plan details)
- ✓ **Filing fee**
- ✓ **Electronic Submittal***
- ✓ **Notification to the District Alder**
 - Please provide an email to the District Alder notifying them that you are filing this UDC application. Please send this as early in the process as possible and provide a copy of that email with the submitted application.

Each submittal must include fourteen (14) 11" x 17" **collated** paper copies. Landscape and Lighting plans (if required) must be **full-sized and legible**. Please refrain from using plastic covers or spiral binding.

Both the paper copies and electronic copies must be submitted prior to the application deadline before an application will be scheduled for a UDC meeting. Late materials will not be accepted. A completed application form is required for each UDC appearance.

For projects also requiring Plan Commission approval, applicants must also have submitted an accepted application for Plan Commission consideration prior to obtaining any formal action (initial or final approval) from the UDC. All plans must be legible when reduced.

**Electronic copies of all items submitted in hard copy are required. Individual PDF files of each item submitted should be compiled on a CD or flash drive, or submitted via email to udcapplications@cityofmadison.com. The email must include the project address, project name, and applicant name. Electronic submittals via file hosting services (such as Dropbox.com) are not allowed. Applicants who are unable to provide the materials electronically should contact the Planning Division at (608) 266-4635 for assistance.*

6. Applicant Declarations

1. Prior to submitting this application, the applicant is required to discuss the proposed project with Urban Design Commission staff. This application was discussed with Jessica Vaughn on July 28, 2022.
2. The applicant attests that all required materials are included in this submittal and understands that if any required information is not provided by the application deadline, the application will not be placed on an Urban Design Commission agenda for consideration.

Name of applicant Jay Patel Relationship to property Development Manager
 Authorizing signature of property owner Date August 15, 2022

7. Application Filing Fees

Fees are required to be paid with the first application for either initial or final approval of a project, unless the project is part of the combined application process involving the Urban Design Commission in conjunction with Plan Commission and/or Common Council consideration. Make checks payable to City Treasurer. Credit cards may be used for application fees of less than \$1,000.

Please consult the schedule below for the appropriate fee for your request:

- Urban Design Districts: \$350 (per §35.24(6) MGO).
- Minor Alteration in the Downtown Core District (DC) or Urban Mixed-Use District (UMX) : \$150 (per §33.24(6)(b) MGO)
- Comprehensive Design Review: \$500 (per §31.041(3)(d)(1)(a) MGO)
- Minor Alteration to a Comprehensive Sign Plan: \$100 (per §31.041(3)(d)(1)(c) MGO)
- All other sign requests to the Urban Design Commission, including, but not limited to: appeals from the decisions of the Zoning Administrator, requests for signage variances (i.e. modifications of signage height, area, and setback), and additional sign code approvals: \$300 (per §31.041(3)(d)(2) MGO)

A filing fee is not required for the following project applications if part of the combined application process involving both Urban Design Commission and Plan Commission:

- Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)
- Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)
- Planned Development (PD): General Development Plan (GDP) and/or Specific Implementation Plan (SIP)
- Planned Multi-Use Site or Residential Building Complex

Introduction

The City of Madison's Urban Design Commission (UDC) has been created to:

- Encourage and promote high quality in the design of new buildings, developments, remodeling, and additions so as to maintain and improve the established standards of property values within the City.
- Foster civic pride in the beauty and nobler assets of the City, and in all other ways possible assure a functionally efficient and visually attractive City in the future.

Types of Approvals

There are three types of requests considered by the UDC:

- Informational Presentation. Applicants may, at their discretion, request to make an Informational Presentation to the UDC prior to seeking any approvals to obtain early feedback and direction before undertaking detailed design. Applicants should provide details on the context of the site, design concept, site and building plans, and other relevant information to help the UDC understand the proposal and provide feedback. (Does not apply to CDR's or Signage Variance requests)
- Initial Approval. Applicants may, at their discretion, request initial approval of a proposal by presenting preliminary design information. As part of their review, the Commission will provide feedback on the design information that should be addressed at Final Approval stage.
- Final Approval. Applicants may request Final Approval of a proposal by presenting all final project details. Recommendations or concerns expressed by the UDC in the initial approval must be addressed at this time.

Presentations to the Commission

Primarily, the UDC is interested in the appearance and design quality of projects. Emphasis should be given to the site plan, landscape plan, lighting plan, building elevations, exterior building materials, color scheme, and graphics.

When presenting projects to the UDC, applicants must fill out a registration slip provided in the meeting room and present it to the Secretary. Presentations should generally be limited to 5 minutes or as extended by motion by consent of the Commission. The Commission will withhold questions until the end of the presentation.

Applicants are encouraged to consider the use of various graphic presentation material including a locator map, photographs, renderings/model, scale drawings of the proposal in context with adjacent buildings/uses/signs, etc., as may be deemed appropriate to describe the project and its surroundings. Graphics should be mounted on rigid boards so that they may be easily displayed. **Applicants/presenters are responsible for all presentation materials, AV equipment and easels.**

URBAN DESIGN DEVELOPMENT PLANS CHECKLIST

The items listed below are minimal application requirements for the type of approval indicated. Please note that the UDC and/or staff may require additional information in order to have a complete understanding of the project.

1. Informational Presentation

- Locator Map
- Letter of Intent (If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required)
- Contextual site information, including photographs and layout of adjacent buildings/structures
- Site Plan
- Two-dimensional (2D) images of proposed buildings or structures.

Providing additional information beyond these minimums may generate a greater level of feedback from the Commission.

Requirements for All Plan Sheets

1. Title block
2. Sheet number
3. North arrow
4. Scale, both written and graphic
5. Date
6. Fully dimensioned plans, scaled at 1"= 40' or larger

*** All plans must be legible, including the full-sized landscape and lighting plans (if required)*

2. Initial Approval

- Locator Map
- Letter of Intent (If the project is within a Urban Design District, a summary of how the development proposal addresses the district criteria is required)
- Contextual site information, including photographs and layout of adjacent buildings/structures
- Site Plan showing location of existing and proposed buildings, walks, drives, bike lanes, bike parking, and existing trees over 18" diameter
- Landscape Plan and Plant List (*must be legible*)
- Building Elevations in both black & white and color for all building sides (include material callouts)
- PD text and Letter of Intent (if applicable)

Providing additional information beyond these minimums may generate a greater level of feedback from the Commission.

3. Final Approval

All the requirements of the Initial Approval (see above), **plus:**

- Grading Plan
- Proposed Signage (if applicable)
- Lighting Plan, including fixture cut sheets and photometrics plan (*must be legible*)
- Utility/HVAC equipment location and screening details (with a rooftop plan if roof-mounted)
- PD text and Letter of Intent (if applicable)
- Samples of the exterior building materials (presented at the UDC meeting)

4. Comprehensive Design Review (CDR) and Variance Requests (Signage applications only)

- Locator Map
- Letter of Intent (a summary of how the proposed signage is consistent with the CDR or Signage Variance criteria is required)
- Contextual site information, including photographs of existing signage both on site and within proximity to the project site
- Site Plan showing the location of existing signage and proposed signage, dimensioned signage setbacks, sidewalks, driveways, and right-of-ways
- Proposed signage graphics (fully dimensioned, scaled drawings, including materials and colors, and night view)
- Perspective renderings (emphasis on pedestrian/automobile scale viewsheds)
- Illustration of the proposed signage that meets Ch. 31, MGO compared to what is being requested.
- Graphic of the proposed signage as it relates to what the Ch. 31, MGO would permit

September 1st, 2022

City of Madison
215 Martin Luther King Jr. Blvd., Suite 017
Madison, WI 53701

Re: Home2 Suites & Tru Dual Brand Hotel by Hilton
2403 East Springs Drive, Madison, WI 53704

Urban Design Commission,

We are resubmitting this package for your consideration and review to reinstate previous approvals granted during the first submittal in 2019 for a 5-story Home 2 Suites & Tru Dual Brand Hotel by Hilton. Hawkeye Hotels will develop and operate this top-tier limited service 219 guestroom hotel.

General Description

Tru is a new brand that is simplified, spirited and grounded in value for guests with a zest for life and a desire for human connection. The Home 2 Suites is an innovative, modern approach to the midscale, extended-stay hotel market targeted at today's tech-savvy, value-oriented traveler. Together, the Home 2 Suites & Tru dual brands will offer travelers a wonderful and exciting mix of business and pleasure.

Site

From East Springs Drive, the site slopes up approximately 22' to where the building pad is situated. We are proposing to leave the existing sloped, curved entry drive as is, due to the connection to the adjacent drive at the northwest edge of the property. The excessive grades, existing shared driveway, and the required fire department access requirements around the perimeter of the hotel all necessitate that the building be located as shown, so it is pushed as close to the front of the lot as is reasonably possible, while still lending a clear and obvious entry point from the street. The Commission of the Zoning Board of Appeals previously approved the 94'-11" variance from the 100'-0" setback for a total of 194'-11" from East Springs Drive to the building. This time, we are requesting the Zoning Board of appeals to re-approve the previous granted approval. 222 parking spaces will be provided on site for hotel occupants. Per Table 281.3, with parking requirements for hotels at .75 per bedroom, we are providing more than the required 183 parking spaces. Since delivery of pre-packaged items and snacks will be by box truck and not by larger semi-trucks, we are once again requesting a waiver on the two (2) 10' x 50' loading spaces, which was previously approved the last time.

Architecture

The overall design shall conform to Hilton Design Standards for the Home 2 Suites & Tru brands. In response to previous staff comments, the hotel's exterior is featuring a building base of slate grayish-brown colored brick, with fiber cement board panels in varying colors and textures utilizing vertical and horizontal reveals on the undulating facades on levels 2 through 5, as it is very important for the vertical elements on these two brands to be consistent and continuous, and limited use of exterior

insulation and finish system (EIFS) on the back (north and east) facades of the upper level only. These materials were previously approved by the Planning Commission, and once again, we are kindly requesting re-approval.

Each wing of the hotel shall employ featured brand colors and elements; the green color and lit “beacon” for Home 2 Suites and the turquoise color and angled element for Tru (please refer to the renderings). To stay true to the aesthetics of each brand while meeting the City’s Ordinance Requirements and the Planning Commission’s previously approved materials, we are incorporating a small amount of vertical green EIFS at the Home2 Suites beacon on the South Elevation, a small amount of blue EIFS at the Tru logo on the upper level only of the South Elevation, and at the vertical multi-colored Tru elements on the West Elevation. These pops of brand colors are not available in any other material, so therefore painted EIFS is the preferred solution to meet these requirements. As a result, we have created a more interesting and vibrant building for the community.

Contemporary light fixtures will blend with the clear anodized aluminum window and storefront systems. Per City Ordinance, the building’s primary (west) street facade facing East Springs Drive will incorporate at least 60% glazing along the lineal length and at least 40% of the area of the ground floor of the facade. And the lit glass “beacon” on top of the Home 2 Suites will represent a landmark that is visible from the highway and that will shine throughout the Commercial Central District.

The trash enclosure to the rear of the site will incorporate the slate grayish-brown brick of the hotel on the exterior and will include painted metal gates.

Previous Pre-approval Comments History

As we began, an initial meeting was held on February 07, 2019, followed by an Informational Presentation on February 27, 2019, where the overall site elements and elevations were discussed. The city officials’ recommendations at the time pointed to specific items, including:

Site

- Building location addressing proposed setback variance due to topography hardship.
- Parking seemed to be excessive.
- ADA access from East Springs Dr to the building with direct connection (ADA ramps).
- The fire pit shall comply with City requirements.

Elevations

- Meet the form requirements for window and door ratios.
- Material requirements; EIFS only allowed on top of building as accent material.
- Design and color; avoid a cookie cutter building without color.

On May 29th, 2019, final hearing for the UDC, the improved project was presented before the Commission, accommodating the items suggested in the previous meetings:

Site

- A contemporary design and updated plans. The building was shifted toward East Springs Drive following an approved variance for the increased setback.
- The parking was adjusted to one parking space per guestroom estimating the hotel capacity at 80% so no employee parking was required.
- The footprint of the building was reduced to fit better on the site.

Elevations

- Roof plans were revised to include the screening of the mechanical units
- A review of the exterior elevations showed multi-colored branding on the West elevation, change of EIFS on some areas.
- The lighting plans showed the beacon and the addition of a vertical element with multi-colored vertical branding.

After the presentation, the Commission granted Final Approval with a few suggestions / questions:

Site

- Provide electric vehicle charging stations.
- Exchange daylilies for another species or perennial.
- Clarifying stormwater system on site; underground oversized tanks.

Elevations

- Clarifying materials; EIFS on the 5th floor of the building. Need to maintain EIFS on colored areas and eliminate it on the visible areas using fiber cement.
- Add a brick corner element on the back.
- Window color: Low-E clear.
- Louver in the windows for HVAC to be the same color as window frame; integral with the window system.

After the approval, the changes were incorporated into the final permit sets, which have been approved for construction. However, the owner has been unable to pull the permit due to the expiration of the entitlement package. There have been no changes to the permit set and as soon as the entitlement package is re-approved, the contractor will be ready to begin construction once again.

Sincerely,

Kastytis Cechavicius
Principal

1785 Village Center Circle #100
Las Vegas Nevada 89134
Office: +1 702 403 1575
Cell: +1 702 244 0013
www.design-cell.com





HawkeyeHotels

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ARCHITECTURE
1785 VILLAGE CENTER CIRCLE SUITE 100
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8/22/2022

PRELIMINARY DESIGN

**HOME2 SUITES & TRU
DUAL BRAND BY HILTON**
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

COVER SHEET

DR_0.1

HOME 2 SUITE & TRU by HILTON

2403 EAST SPRINGS DR., MADISON, WI 53704

ENTITLEMENT PACKAGE

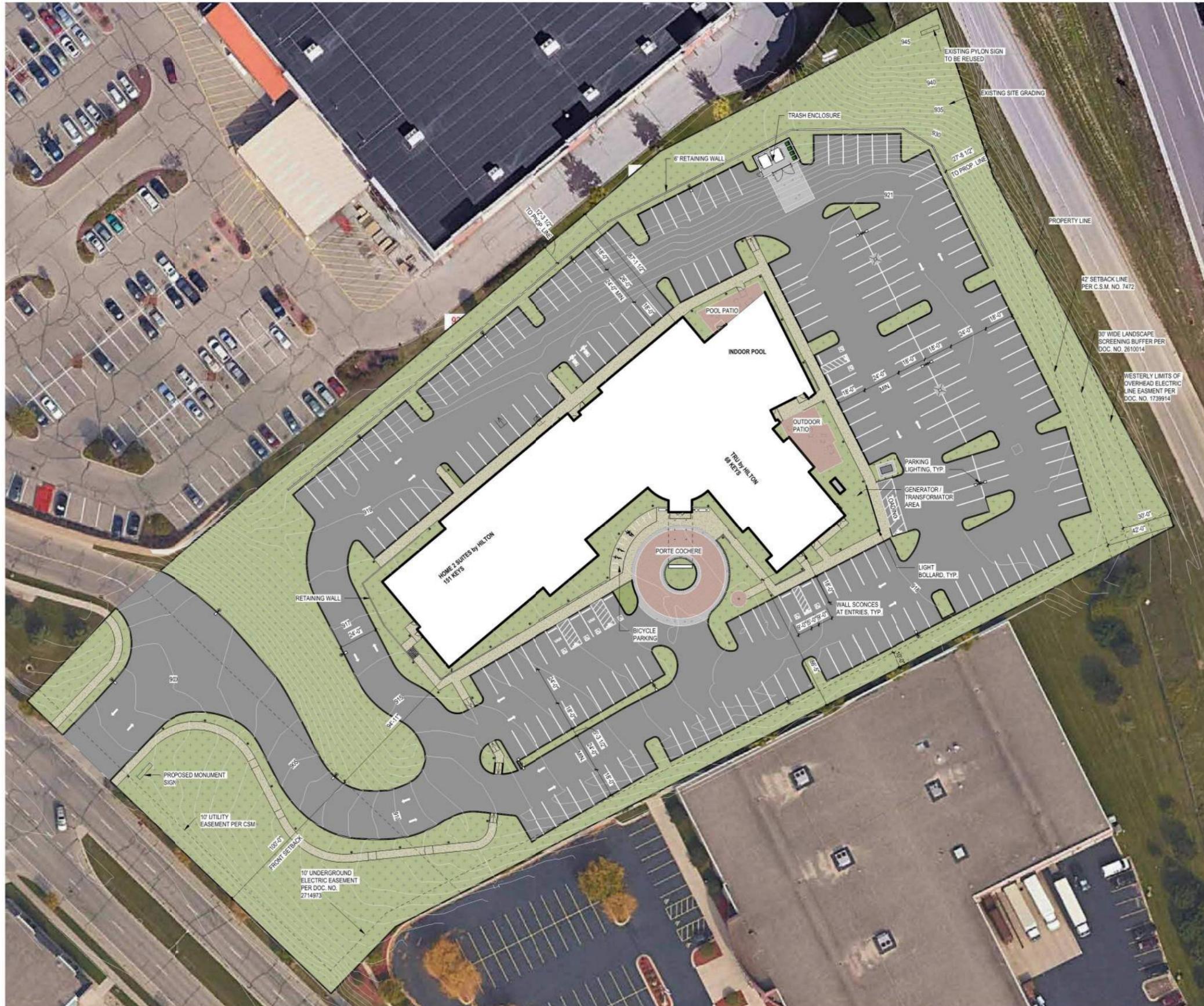
AUGUST 22, 2022

SHEET INDEX

- DR_0.1 COVER SHEET
- DR_0.2 RENDERINGS
- DR_1.1 SITE PLAN / SITE DATA
- DR_1.2 CONTEXTUAL SITE INFORMATION
- DR_1.3 CONTEXTUAL SITE INFORMATION
- DR_1.4 CONTEXTUAL SITE INFORMATION
- DR_A2.1 FLOOR PLAN - LEVEL 1
- DR_A2.2 FLOOR PLAN - LEVEL 2
- DR_A2.3 FLOOR PLAN - LEVEL 3-5 (TYP.)
- DR_A3.1 BUILDING ELEVATIONS
- DR_A3.2 BUILDING ELEVATIONS
- DR_A3.3 BUILDING ELEVATIONS (BLACK AND WHITE)
- DR_A3.4 BUILDING ELEVATIONS (BLACK AND WHITE)
- DR_A4.1 ROOF PLAN
- DR_A5.1 MATERIAL BOARD
- DR_A5.2 PERSPECTIVE VIEWS
- DR_P1.0 PHOTOMETRIC STUDY







PROJECT SUMMARY

THIS PROJECT CONSISTS OF SITE DEVELOPMENT AND BUILDING DESIGN FOR 219 KEYS, 5-STORY HOME 2 SUITES & TRU DUAL BRAND HOTEL BY HILTON.

SITE SUMMARY

DESCRIPTION	INFORMATION / REQUIREMENT	COMPLIANCE
APN	0810-2711-4040	
ADDRESS	2403 EAST SPRINGS DR., MADISON, WI	
JURISDICTION	CITY OF MADISON, WI	
ZONING CLASSIFICATION	CC	
PLANNED LAND USE	COMMERCIAL	
HOTEL USE ALLOWED	YES	Y
# OF PARKING STALLS REQUIRED	REFER TO CODE FOR DETAIL	Y
SIZE OF PARKING STALLS REQUIRED	8' x 18'	Y
ALLOWABLE BUILDING HEIGHT	85'-0"	Y
ACTUAL BUILDING HEIGHT	66'-3"	
FIRE ACCESS REQUIRED	24'-0" DRIVEWAY	Y
FRONT SETBACK	10'-0"	Y
SIDE SETBACK	6'-0"	Y
REAR SETBACK	20'-0"	Y
NOTE:		

AREA CALCULATIONS

DESCRIPTION	AREA	PERCENTAGE
BUILDING FOOTPRINT	25,324 SF	12%
HARDSCAPE	10,217 SF	5%
LANDSCAPE	82,480 SF	39%
PARKING LDT AREA	92,010 SF	44%
TOTAL	210,031 SF	100%

ACTUAL BUILDING AREA (GROSS)

LEVEL	AREA
LEVEL 1	25,011 SF
LEVEL 2	22,120 SF
LEVEL 3	22,120 SF
LEVEL 4	22,116 SF
LEVEL 5	22,116 SF
TOTAL AREA:	113,484 SF

PARKING REQUIRED

USE	REQUIREMENT	SPACES REQUIRED
HOTEL	1.00 PER GUESTROOM	219
BIKE	1 PER 10 GUESTROOMS	22
NOTE:	UP TO 25% CAN BE COMPACT	

PARKING PROVIDED

TYPE	COUNT
8' X 18' - 90' (ACCESSIBLE)	4
8' X 18' - 90' (ACCESSIBLE/VAN)	2
8' X 18' - 90'	212
8' X 18' - 90' (ACCESSIBLE)	2
8' X 18' - 90' EV	2
TOTAL	222

VICINITY MAP



1 SITE PLAN
1" = 30'-0"



designcell ARCHITECTURE
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LAS VEGAS, NV 89134, T. 702.403.1575
WWW.DESIGN-CELL.COM

8/22/2022
PRELIMINARY DESIGN

**HOME2 SUITES & TRU
DUAL BRAND BY HILTON**
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068
SITE PLAN / SITE DATA

DR_1.1



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CONTEXTUAL
SITE
INFORMATION

DR_1.2



VIEW FROM E SPRINGS DR. #6



VIEW FROM HIGHWAY #4



VIEW FROM HIGHWAY #5



VIEW FROM PROPOSED SITE #1



VIEW FROM PROPOSED SITE #2



VIEW FROM OFF RAMP #3



VIEW FROM HIGH CROSSING BLVD. #A



VIEW FROM 94 HIGHWAY. #B



VIEW FROM HIGH CROSSING BLVD. #C



VIEW FROM 94 HIGHWAY RAMP. #F



VIEW FROM 94 HIGHWAY. #H



VIEW FROM E SPRINGS DR. #I



VIEW FROM PARKING LOT. #D



SLUMBERLAND FURNITURE PARKING LOT. #Y



VIEW FROM 94 HIGHWAY RAMP. #Z



VIEW FROM HOME DEPOT PARKING LOT. #E



GOOGLE EARTH IMAGES SHOWING PROPOSED NEW HOTEL ON SITE



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PRELIMINARY DESIGN

**HOME2 SUITES & TRU
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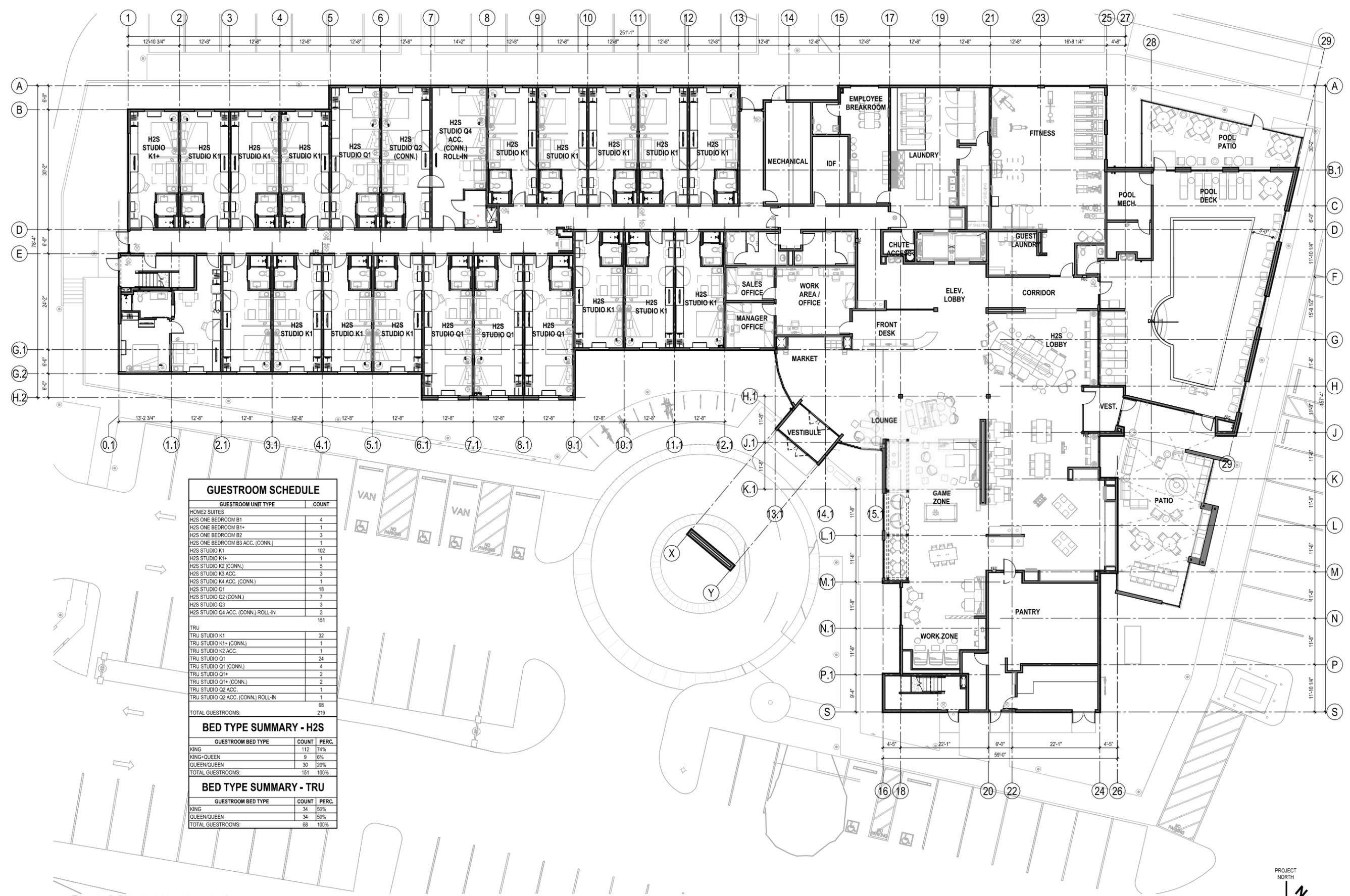
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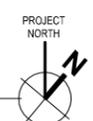
CONTEXTUAL
SITE
INFORMATION

DR_1.4



GUESTROOM SCHEDULE		
GUESTROOM UNIT TYPE	COUNT	
HOME2 SUITES		
H2S ONE BEDROOM B1	4	
H2S ONE BEDROOM B1+	1	
H2S ONE BEDROOM B2	3	
H2S ONE BEDROOM B3 ACC. (CONN.)	1	
H2S STUDIO K1	102	
H2S STUDIO K1+	1	
H2S STUDIO K2 (CONN.)	5	
H2S STUDIO K3 ACC.	3	
H2S STUDIO K4 ACC. (CONN.)	1	
H2S STUDIO Q1	18	
H2S STUDIO Q2 (CONN.)	7	
H2S STUDIO Q3	3	
H2S STUDIO Q4 ACC. (CONN.) ROLL-IN	2	
	151	
TRU		
TRU STUDIO K1	32	
TRU STUDIO K1+ (CONN.)	1	
TRU STUDIO K2 ACC.	1	
TRU STUDIO Q1	24	
TRU STUDIO Q1 (CONN.)	4	
TRU STUDIO Q1+ (CONN.)	2	
TRU STUDIO Q2 ACC.	1	
TRU STUDIO Q2 ACC. (CONN.) ROLL-IN	1	
	68	
TOTAL GUESTROOMS:	219	
BED TYPE SUMMARY - H2S		
GUESTROOM BED TYPE	COUNT	PERC.
KING	112	74%
KING+QUEEN	9	6%
QUEEN/QUEEN	30	20%
TOTAL GUESTROOMS:	151	100%
BED TYPE SUMMARY - TRU		
GUESTROOM BED TYPE	COUNT	PERC.
KING	34	50%
QUEEN/QUEEN	34	50%
TOTAL GUESTROOMS:	68	100%

1 FLOOR PLAN - LEVEL 1
3/32" = 1'-0"





HawkeyeHotels

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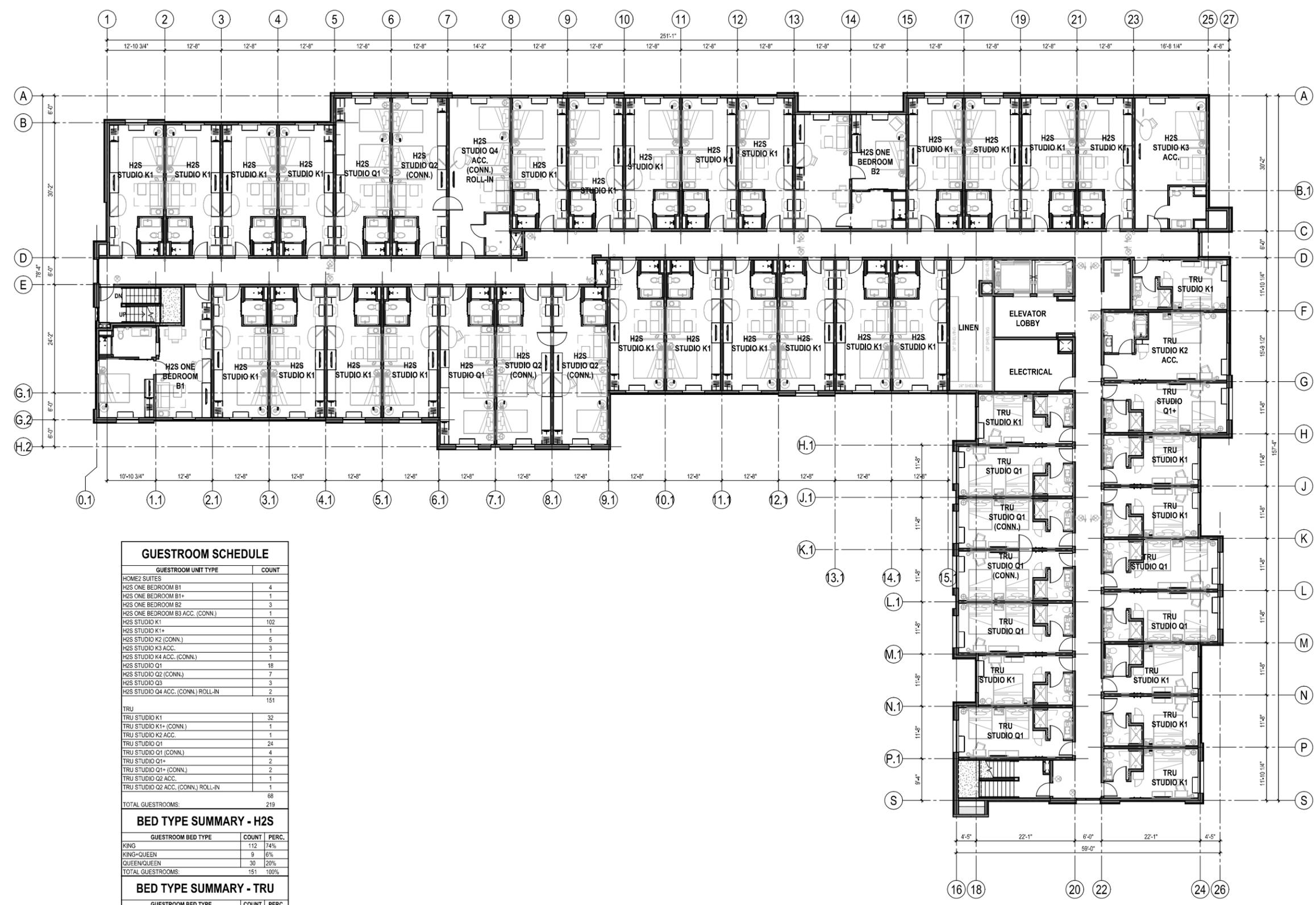
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PRELIMINARY DESIGN

HOME2 SUITES & TRU
DUAL BRAND BY HILTON
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

FLOOR PLAN -
LEVELS 3-5 (TYP.)

DR_A2.3



GUESTROOM SCHEDULE		
GUESTROOM UNIT TYPE	COUNT	
HOME2 SUITES		
H2S ONE BEDROOM B1	4	
H2S ONE BEDROOM B1+	1	
H2S ONE BEDROOM B2	3	
H2S ONE BEDROOM B3 ACC. (CONN.)	1	
H2S STUDIO K1	102	
H2S STUDIO K1+	1	
H2S STUDIO K2 (CONN.)	5	
H2S STUDIO K3 ACC.	3	
H2S STUDIO K4 ACC. (CONN.)	1	
H2S STUDIO Q1	18	
H2S STUDIO Q2 (CONN.)	7	
H2S STUDIO Q3	3	
H2S STUDIO Q4 ACC. (CONN.) ROLL-IN	2	
	151	
TRU		
TRU STUDIO K1	32	
TRU STUDIO K1+ (CONN.)	1	
TRU STUDIO K2 ACC.	1	
TRU STUDIO Q1	24	
TRU STUDIO Q1 (CONN.)	4	
TRU STUDIO Q1+	2	
TRU STUDIO Q1+ (CONN.)	2	
TRU STUDIO Q2 ACC.	1	
TRU STUDIO Q2 ACC. (CONN.) ROLL-IN	1	
	68	
TOTAL GUESTROOMS:	219	
BED TYPE SUMMARY - H2S		
GUESTROOM BED TYPE	COUNT	PERC.
KING	112	74%
KING+QUEEN	9	6%
QUEEN+QUEEN	30	20%
TOTAL GUESTROOMS:	151	100%
BED TYPE SUMMARY - TRU		
GUESTROOM BED TYPE	COUNT	PERC.
KING	34	50%
QUEEN+QUEEN	34	50%
TOTAL GUESTROOMS:	68	100%

1 FLOOR PLAN - LEVELS 3-5 (TYP.)
3/32" = 1'-0"





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PROJECT NUMBER: 18 068
BUILDING ELEVATIONS

DR_A3.1



1 SOUTH ELEVATION
3/32" = 1'-0"

EXTERIOR FINISH LEGEND		
SYMBOL	ID	DESCRIPTION
	PT1	EFS, PAINTED METAL, SHERWIN-WILLIAMS SPATIAL WHITE SW 6259
	PT2	EFS, PAINTED METAL, SHERWIN-WILLIAMS IRON ORE SW 7069
	PT3	EFS, BENJAMIN MOORE, FLOWER POWER (NO SUBSTITUTIONS)
	PT4	EFS, PANTONE PMS #2685C (NO SUBSTITUTIONS)
	PT5	EFS, PANTONE PMS PROCESS YELLOW (NO SUBSTITUTIONS)
	PT6	EFS, PANTONE PMS PROCESS CYAN (NO SUBSTITUTIONS)
	PT7	EFS, PANTONE PMS #2955C (NO SUBSTITUTIONS)
	PT8	EFS, PANTONE PMS #317C (NO SUBSTITUTIONS)
	FC1	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE ARCTIC WHITE (OR SIMILAR)
	FC2	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE BLACK BROWN (OR SIMILAR)
	BD1	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH MISSION GRAY (OR SIMILAR)
	SD2	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH BLACK BROWN (OR SIMILAR)
	BR1	THIN BRICK VENEER GLEN GERY SLATE (S15-1557) EASTLINE THIN BRICK (OR SIMILAR)



PRIMARY STREET FACADE
1/16" = 1'-0"



2 WEST ELEVATION
3/32" = 1'-0"



3 SITE SECTION EAST-WEST
1" = 20'-0"



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PRELIMINARY DESIGN

**HOME2 SUITES & TRU
DUAL BRAND BY HILTON**
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

BUILDING
ELEVATIONS

DR_A3.2



2 NORTH ELEVATION
3/32" = 1'-0"

EXTERIOR FINISH LEGEND		
SYMBOL	ID	DESCRIPTION
	PT1	EIFS, PAINTED METAL, SHERWIN-WILLIAMS SPATIAL WHITE SW 6259
	PT2	EIFS, PAINTED METAL, SHERWIN-WILLIAMS IRON ORE SW 7069
	PT3	EIFS, BENJAMIN MOORE, FLOWER POWER (NO SUBSTITUTIONS)
	PT4	EIFS, PANTONE PMS #2685C (NO SUBSTITUTIONS)
	PT5	EIFS, PANTONE PMS PROCESS YELLOW (NO SUBSTITUTIONS)
	PT6	EIFS, PANTONE PMS PROCESS CYAN (NO SUBSTITUTIONS)
	PT7	EIFS, PANTONE PMS #2955C (NO SUBSTITUTIONS)
	PT8	EIFS, PANTONE PMS #317C (NO SUBSTITUTIONS)
	FC1	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE ARCTIC WHITE (OR SIMILAR)
	FC2	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE BLACK BROWN (OR SIMILAR)
	BD1	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH MISSION GRAY (OR SIMILAR)
	BD2	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH BLACK BROWN (OR SIMILAR)
	BR1	THIN BRICK VENEER GLEN GERY SLATE (S15-1557) EASTLINE THIN BRICK (OR SIMILAR)



1 EAST ELEVATION
3/32" = 1'-0"



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PRELIMINARY DESIGN

HOME2 SUITES & TRU
DUAL BRAND BY HILTON

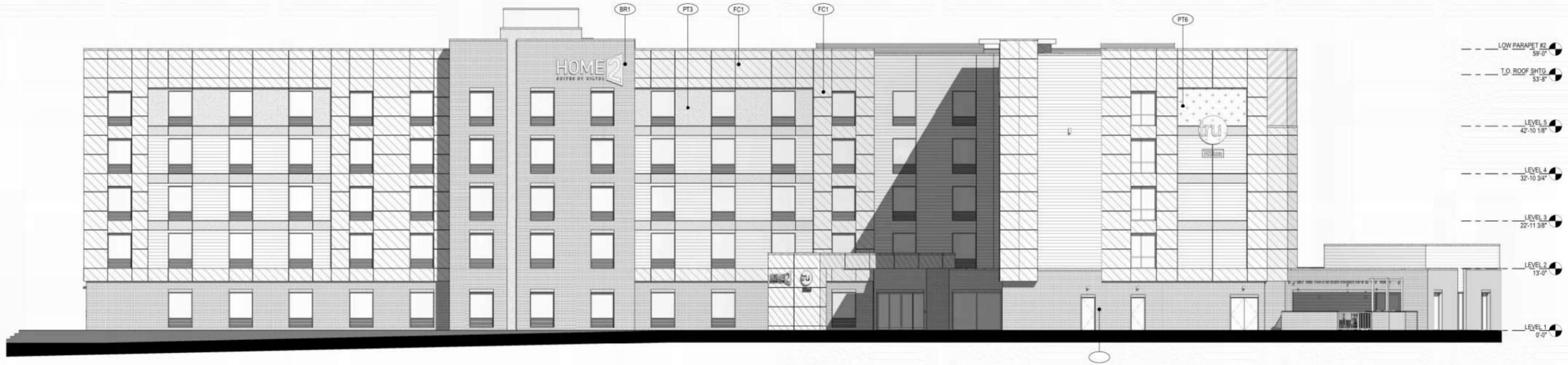
5-STORY, 219 GUESTROOMS

2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

BUILDING
ELEVATIONS
(BLACK AND
WHITE)

DR_A3.3



1 SOUTH ELEVATION
3/32" = 1'-0"

EXTERIOR FINISH LEGEND		
SYMBOL	ID	DESCRIPTION
	PT1	EFS, PAINTED METAL, SHERWIN-WILLIAMS SPATIAL WHITE SW 6259
	PT2	EFS, PAINTED METAL, SHERWIN-WILLIAMS IRON ORE SW 7069
	PT3	EFS, BENJAMIN MOORE, FLOWER POWER (NO SUBSTITUTIONS)
	PT4	EFS, PANTONE PMS #2685C (NO SUBSTITUTIONS)
	PT5	EFS, PANTONE PMS PROCESS YELLOW (NO SUBSTITUTIONS)
	PT6	EFS, PANTONE PMS PROCESS CYAN (NO SUBSTITUTIONS)
	PT7	EFS, PANTONE PMS #2955C (NO SUBSTITUTIONS)
	PT8	EFS, PANTONE PMS #317C (NO SUBSTITUTIONS)
	BD1	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH MISSION GRAY (OR SIMILAR)
	BD2	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH BLACK BROWN (OR SIMILAR)
	BR1	THIN BRICK VENEER GLEN GERY SLATE (S15-1557) EASTLINE THIN BRICK (OR SIMILAR)
	FC1	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE ARCTIC WHITE (OR SIMILAR)
	FC2	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE BLACK BROWN (OR SIMILAR)



2 WEST ELEVATION
3/32" = 1'-0"



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PRELIMINARY DESIGN

HOME2 SUITES & TRU
DUAL BRAND BY HILTON

5-STORY, 219 GUESTROOMS

2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

BUILDING
ELEVATIONS
(BLACK AND
WHITE)

DR_A3.4



2 NORTH ELEVATION
3/32" = 1'-0"

EXTERIOR FINISH LEGEND		
SYMBOL	ID	DESCRIPTION
	PT1	EIFS, PAINTED METAL, SHERWIN-WILLIAMS SPATIAL WHITE SW 6299
	PT2	EIFS, PAINTED METAL, SHERWIN-WILLIAMS IRON ORE SW 7069
	PT3	EIFS, BENJAMIN MOORE, FLOWER POWER (NO SUBSTITUTIONS)
	PT4	EIFS, PANTONE PMS #2685C (NO SUBSTITUTIONS)
	PT5	EIFS, PANTONE PMS PROCESS YELLOW (NO SUBSTITUTIONS)
	PT6	EIFS, PANTONE PMS PROCESS CYAN (NO SUBSTITUTIONS)
	PT7	EIFS, PANTONE PMS #2955C (NO SUBSTITUTIONS)
	PT8	EIFS, PANTONE PMS #317C (NO SUBSTITUTIONS)
	BD1	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH MISSION GRAY (OR SIMILAR)
	BR1	FIBER CEMENT LAP SIDING HARDIEPLANK - SMOOTH BLACK BROWN (OR SIMILAR)
	FC1	THIN BRICK VENEER GLEN GERY SLATE (S15-1557) EASTLINE THIN BRICK (OR SIMILAR)
	FC2	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE ARCTIC WHITE (OR SIMILAR)
	FC2	FIBER CEMENT PANEL SYSTEM, REVEAL PANEL SYSTEM BY JAMES HARDIE BLACK BROWN (OR SIMILAR)



1 EAST ELEVATION
3/32" = 1'-0"



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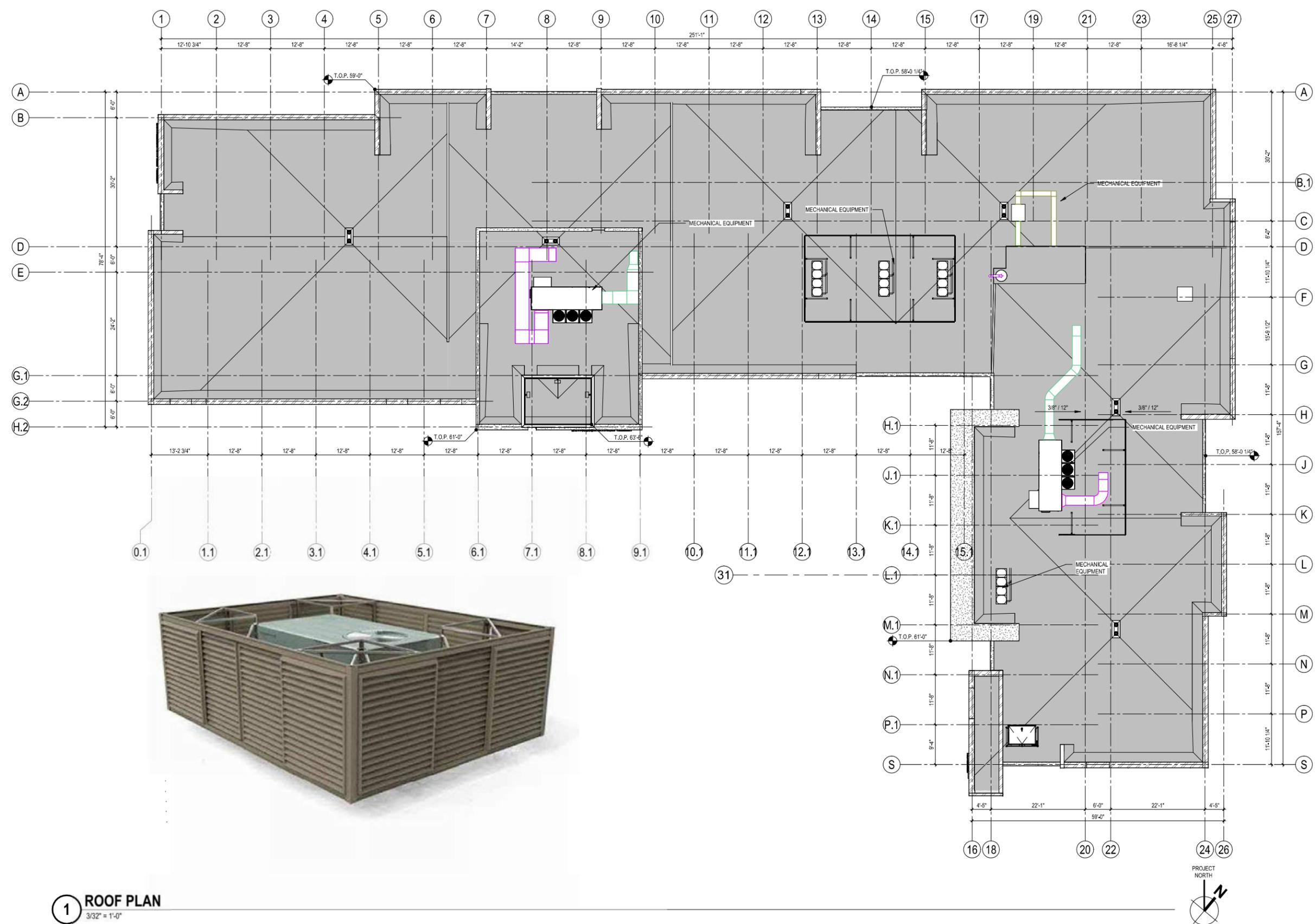
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PRELIMINARY DESIGN

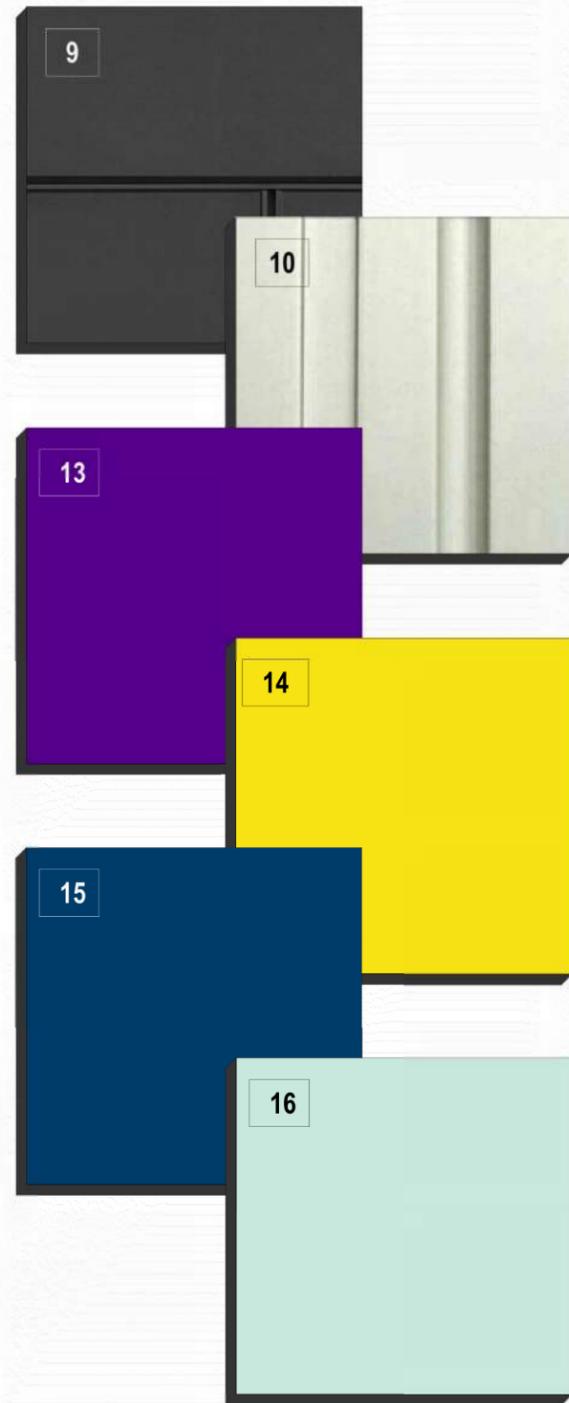
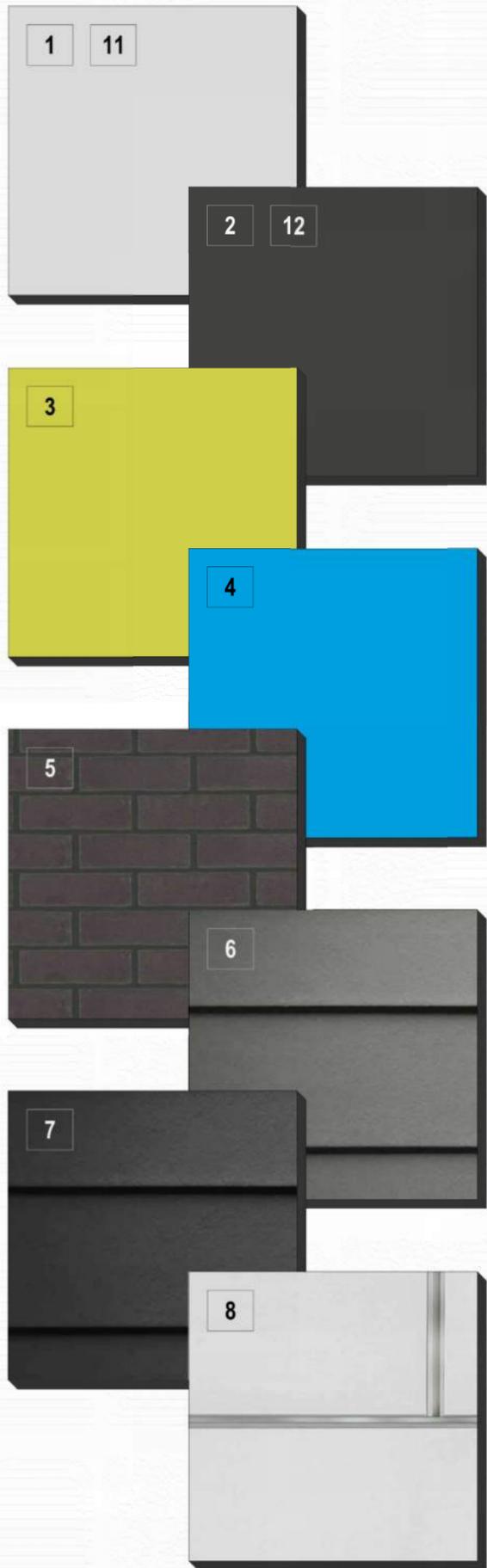
**HOME2 SUITES & TRU
DUAL BRAND BY HILTON**
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068
ROOF PLAN

DR_A4.1



1 ROOF PLAN
3/32" = 1'-0"



1 **PT1, MTL2**
11 EIFS, PAINTED METAL
 SHERWIN-WILLIAMS
 SPATIAL WHITE
 SW 6259

2 **PT2, MTL3**
12 EIFS, PAINTED METAL
 SHERWIN-WILLIAMS
 IRON ORE
 SW 7069

3 **PT3**
 EIFS
 BENJAMIN MOORE
 FLOWER POWER
 (NO SUBSTITUTIONS)

4 **PT6**
 EIFS
 PANTONE
 PROCESS CYAN C
 (NO SUBSTITUTIONS)

5 **BR1**
 THIN BRICK VENEER
 GLEN GERY
 SLATE (S15-1557)
 EASTLINE THIN BRICK
 (OR SIMILAR)

6 **BD1**
 FIBER CEMENT LAP SIDING
 HARDIEPLANK - SMOOTH
 MISSION GRAY
 (OR SIMILAR)

7 **BD2**
 FIBER CEMENT LAP SIDING
 HARDIEPLANK - SMOOTH
 BLACK BROWN
 (OR SIMILAR)

8 **FC1**
 FIBER CEMENT PANEL SYSTEM
 REVEAL PANEL SYSTEM BY
 JAMES HARDIE
 ARTIC WHITE
 (OR SIMILAR)

9 **FC2**
 FIBER CEMENT PANEL SYSTEM
 REVEAL PANEL SYSTEM BY
 JAMES HARDIE
 BLACK BROWN
 (OR SIMILAR)

10 **MTL1**
 ALUMINUM STOREFRONT
 AND WINDOW FRAMES

13 **PT4**
 EIFS
 PANTONE
 PMS #2685C
 (NO SUBSTITUTIONS)

14 **PT5**
 EIFS
 PANTONE
 PMS PROCESS YELLOW
 (NO SUBSTITUTIONS)

15 **PT7**
 EIFS
 PANTONE
 PMS #2955C
 (NO SUBSTITUTIONS)

16 **PT8**
 EIFS
 PANTONE
 PMS #317C
 (NO SUBSTITUTIONS)



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PRELIMINARY DESIGN

**HOME2 SUITES & TRU
 DUAL BRAND BY HILTON**

5-STORY, 219 GUESTROOMS

2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

MATERIAL BOARD

DR_A5.1



2 PERSPECTIVE VIEW 2



1 PERSPECTIVE VIEW 1



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PRELIMINARY DESIGN

**HOME2 SUITES & TRU
DUAL BRAND BY HILTON**
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068
PERSPECTIVE
VIEWS

DR_A5.2

COMcheck Software Version 4.1.5.4
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Home2 Suites & Tru by Hilton
 Project Type: New Construction

Construction Site: 2403 EAST SPRINGS DR, Madison East, WI 53704
 Owner/Agent: JAY PATEL, HAWKEYE HOTELS, 6251 JOLIET ROAD, COUNTRYSIDE, IL 60525
 Designer/Contractor: Ardebili Engineering, LLC, 8100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251, 480.626.7072, info@ardebilieng.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
 Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B X C)
1-Hotel	113484	0.78	88558
Total Allowed Watts =			88558

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Hotel				
LED 1: C1: CEILING LAMP: Other:	1	10	32	320
LED 2: F: PENDANT: Other:	1	1	225	225
LED 3: J: WALL SCONCE: Other:	1	115	36	4140
LED 4: L03: RECESSED DOWNLIGHT: Other:	1	83	21	1743
LED 5: LP-400: VANITY FIXTURE: Other:	1	83	60	4980
LED 6: ND-1895: DECORATIVE PENDANT: Other:	1	12	75	900
LED 7: PA-300: DECORATIVE PENDANT: Other:	1	3	20	60
LED 8: PA-301: DECORATIVE PENDANT: Other:	1	3	20	60
LED 9: PA-309: LINEAR LED: Other:	1	6	20	120
LED 10: PA-309-2: LINEAR LED: Other:	1	4	20	80
LED 11: PR: SURFACE MOUNT: Other:	1	3	18	54
LED 12: R1: RECESSED DOWNLIGHT: Other:	1	236	36	8496
LED 13: R2: RECESSED DOWNLIGHT: Other:	1	17	36	612
LED 14: T2: 2X4 LAYIN: Other:	1	22	96	2112
LED 15: T3: 1X4 SURFACE: Other:	1	16	64	1024
Total Proposed Watts =				24928

Project Title: Home2 Suites & Tru by Hilton Report date: 09/14/22
 Data filename: Z:\Shared\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru(Shared)\Energy\IECC.cck Page 1 of 10

Interior Lighting PASSES: Design 72% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Gilberto Hernandez - Project Manager *Gilberto Hernandez* 9/14/22
 Name - Title Signature Date

Project Title: Home2 Suites & Tru by Hilton Report date: 09/14/22
 Data filename: Z:\Shared\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru(Shared)\Energy\IECC.cck Page 2 of 10

COMcheck Software Version 4.1.5.4
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Home2 Suites & Tru by Hilton
 Project Type: New Construction
 Exterior Lighting Zone: 2 (Neighborhood business district (L22))

Construction Site: 2403 EAST SPRINGS DR, Madison East, WI 53704
 Owner/Agent: JAY PATEL, HAWKEYE HOTELS, 6251 JOLIET ROAD, COUNTRYSIDE, IL 60525
 Designer/Contractor: Ardebili Engineering, LLC, 8100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251, 480.626.7072, info@ardebilieng.com

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Parking area	86364 ft ²	0.06	Yes	5182
Driveway	17062 ft ²	0.06	Yes	1024
Total Tradable Watts (a) =				6206
Total Allowed Watts =				6206
Total Allowed Supplemental Watts (b) =				600

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
 (b) A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Parking area (86364 ft²): Tradable Wattage				
LED 1: SA: DUAL HEAD POLE: Other:	1	5	366	1830
LED 2: SB: SINGLE HEAD POLE: Other:	1	8	207	1656
LED 3: SC: SINGLE HEAD POLE: Other:	1	2	183	366
LED 6: SFE: WALL SCONCE: Other:	1	6	7	41
LED 6: SGE: DOWNLIGHT: Other:	1	1	10	10
LED 7: SH: FESTOON: Other:	1	76	2	137
Driveway (17062 ft²): Tradable Wattage				
LED 4: SD: BOLLARD: Other:	1	41	16	656
Total Tradable Proposed Watts =				4698

Project Title: Home2 Suites & Tru by Hilton Report date: 09/14/22
 Data filename: Z:\Shared\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru(Shared)\Energy\IECC.cck Page 3 of 10

Exterior Lighting PASSES: Design 31% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.4 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Gilberto Hernandez - Project Manager *Gilberto Hernandez* 9/22/14
 Name - Title Signature Date

Project Title: Home2 Suites & Tru by Hilton Report date: 09/14/22
 Data filename: Z:\Shared\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru(Shared)\Energy\IECC.cck Page 4 of 10



HOME2 SUITES & TRU BY HILTON
 5-STORY, 219 GUESTROOMS
 PROJECT NO.: 19-157ND / MSNMDHT / ID NO:55260 (H2S)
 PROJECT NO.: 19-158ND / MSNMRU / ID NO:55261 (TRU)
 2403 EAST SPRINGS DR, MADISON, WI

PERMIT SUBMITTAL 03/12/2020

REVISIONS:

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PROJECT NUMBER: 18 066

IECC REPORTS

E0.04



ARDEBILI Engineering

Project Number: 19280 | Project Manager: GH
 8100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251
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HOME2 SUITES & TRU BY HILTON
5-STORY, 219 GUESTROOMS
PROJECT NO.: 19-157ND / MSNMDHT / ID NO:55260 (H2S)
PROJECT NO.: 19-158ND / MSNMRU / ID NO:55261 (TRU)
2403 EAST SPRINGS DR, MADISON, WI

PERMIT SUBMITTAL 03/12/2020

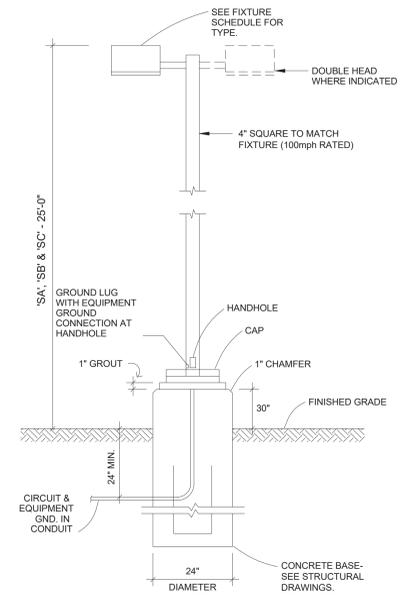
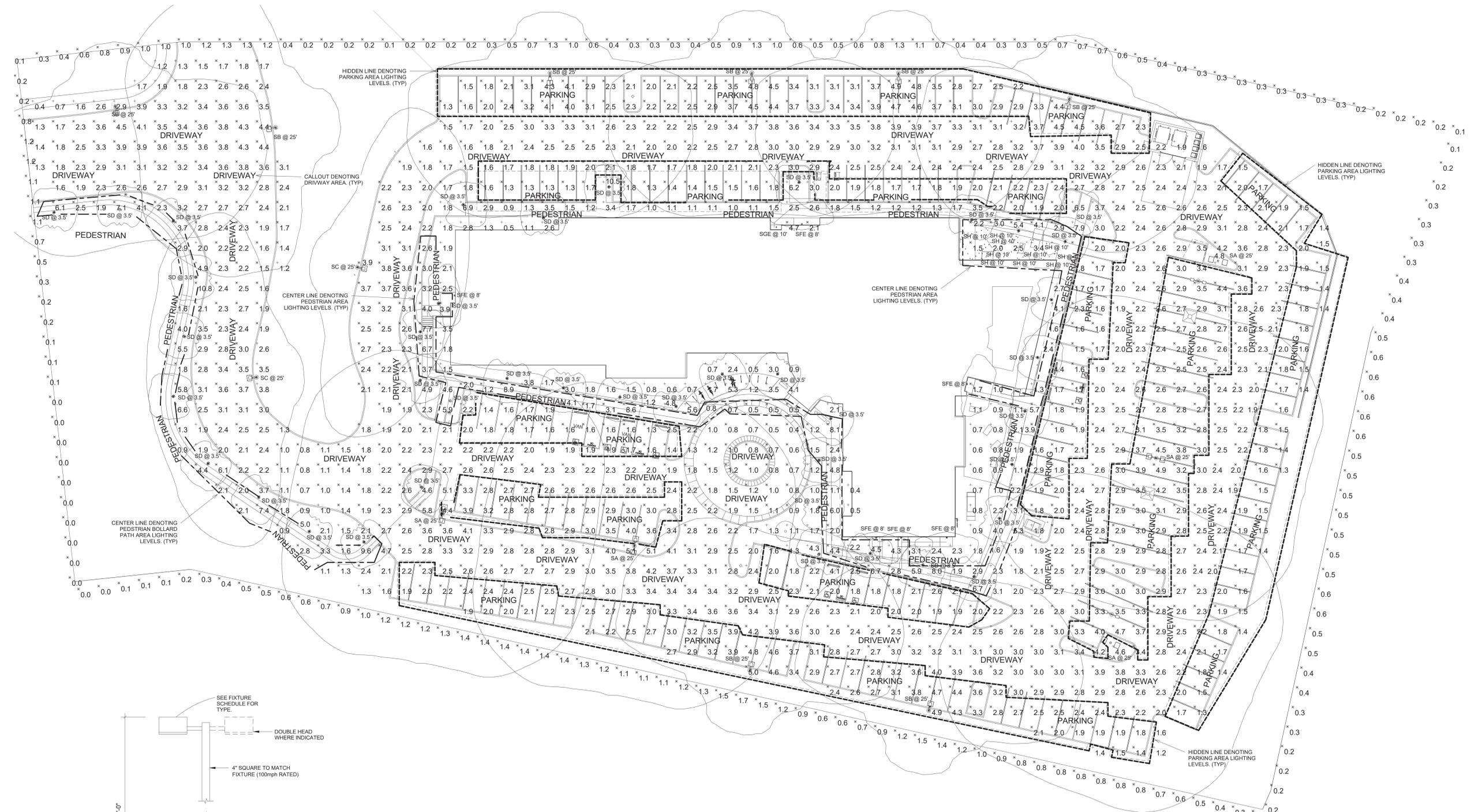
REVISIONS:

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PROJECT NUMBER: 19 066

SITE PHOTOMETRICS

E1.02



LIGHT POLE 'SA', 'SB' & 'SC'

NOTE: CONTRACTOR SHALL PROVIDE NEW POLE BASES WHERE INDICATED ON PLANS. LIGHTING FIXTURE POLE DETAILS AND DESCRIPTIONS ARE FOR ELECTRICAL REFERENCES ONLY. THE POLE AND BASE SHALL BE DESIGNED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN AND BE STAMPED AND SEALED ACCORDINGLY AS A DEFERRED SUBMITTAL.

1 SITE PHOTOMETRICS
1" = 20'-0"

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
EM	EM	1	Lithonia Lighting	AFF OEL (FINISH) UVOLT LTP SDR WT	AFF premium FCT (WT Throw)	LED	AFF_WT.ies	568	0	5.7
SA	SA	5	Lithonia Lighting	(2) DSX1 LED P7 30K T5W MVOLT SPA (FINISH) / SSS 22.5" W/2.5" BASE	TWIN-HEAD DSX1 LED P7 30K T5W MVOLT	LED - 3000K	DSX1_LED_P7_30K_T5W_MVOLT.ies	19850	0.91	366
SB	SB	8	Lithonia Lighting	DSX1 LED P8 30K T4M MVOLT SPA (FINISH) / SSS 22.5" W/2.5" BASE	DSX1 LED P8 30K T4M MVOLT	LED - 3000K	DSX1_LED_P8_30K_T4M_MVOLT.ies	22037	0.91	207
SC	SC	2	Lithonia Lighting	DSX1 LED P7 30K T2M MVOLT SPA (FINISH) / SSS 22.5" W/2.5" BASE	DSX1 LED P7 30K T2M MVOLT	LED - 3000K	DSX1_LED_P7_30K_T2M_MVOLT.ies	19205	0.91	183
SD	SD	41	Lithonia Lighting	DSXB LED 12C 350 30K ASY MVOLT (FINISH)	D-SERIES BOLLARD WITH 12 3000K LEDS OPERATED AT 350mA AND ASYMMETRIC DISTRIBUTION	LED - 3000K	DSXB_LED_12C_350_30K_ASY.ies	1194	0.91	16
SFE	SFE	6	Lithonia Lighting	WDGE2 LED P0 30K 80CRI T3M MVOLT E20WC (FINISH)	WDGE2 LED WITH P0 - PERFORMANCE PACKAGE, 3000K, 80CRI, TYPE 3 MEDIUM OPTIC W/EM BATTERY PACK	LED - 3000K	WDGE2_LED_P0_30K_80CRI_T3M.ies	693	0.91	6.8946
SGE	SGE	1	Lithonia Lighting	LDN6 30/10 L06AR LSS MVOLT E20 EL	6IN LDN, 3000K, 1000LM, CLEAR, SEMI-SPECULAR REFLECTOR, CR180 W/EM BATTERY PACK	LED - 3000K	LDN6_30_10_L06AR_LSS.ies	938	0.91	10.44
SH	SH	76	TOKISTAR LIGHTING	EX (FINISH)-24-EX-UBIW-G14	FESTOON LIGHTING	LED - 3000K	EXLED_UB_2400_K_V.1.ies	45	0.91	1.8

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DRIVEWAY	X	2.6 fc	4.5 fc	0.4 fc	11.3:1	6.5:1
PARKING EAST	X	2.5 fc	4.9 fc	1.3 fc	3.8:1	1.9:1
PARKING NORTH	X	2.5 fc	4.9 fc	0.9 fc	5.4:1	2.8:1
PARKING SOUTH	X	2.6 fc	5.0 fc	1.3 fc	3.8:1	2.0:1
PEDESTRIAN	X	3.5 fc	8.9 fc	0.5 fc	17.8:1	7.0:1
PROPERTY LINE - FC @ GRADE	X	0.6 fc	1.7 fc	0.0 fc	N/A	N/A
SITE - FC @ GRADE	+	2.6 fc	10.8 fc	0.4 fc	27.0:1	6.5:1
BOLLARD PATH	X	3.8 fc	10.8 fc	0.9 fc	12.0:1	4.2:1



ARDEBILI Engineering

Project Number: 19280 | Project Manager: GH
6100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251
P: 480.626.7072 | ardebili.com

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FEATURES & SPECIFICATIONS

INTENDED USE — Ideal for applications requiring low-profile, attractive emergency lighting with optional normally-off or normally-on with photocell control. Provides a minimum of 90 minutes of illumination both indoors and outdoors upon loss of AC power. Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic/Polycarbonate Compatibility table for suitable uses.

CONSTRUCTION — Compact, low profile, architectural design with die-cast aluminum housing. Finish is textured powder coat paint for dark bronze, white, black and non-textured for natural aluminum. Test switch indicator light and remote enabled are located on the bottom of the housing and are easily accessible and visible from the floor.

OPTICS — LEDs with 120/45/50/90 hours. Delivers 635 lumens in normal. On and Emergency operation. Optional HED configurable for wide and/or narrow throw distribution (US Patent Pending). Outdoor wide throw distribution: 70° (3° path of egress) at a 7.5' mounting height with 1 FC Average.

4,000K correlated color temperature (CCT).

ELECTRICAL — UVOLT 120 then 247V, 50/60Hz. Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers certified in the CA Title 20 Appliance Efficiency Database.

Short-circuit protection — current-limiting charge circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages. Prevents overcharging that shortens battery life and reduces capacity. Filtered charger input minimizes charge voltage ripple and extends battery life.

Photo-circuit option (PE) for normally on product in order to discontinue illumination during periods when ambient light is present.

Remote units (DLR) are normally off. Emergency only functionality with DC power from an external battery.

BATTERIES Sealed, maintenance-free Lithium Ion Phosphate battery.

SELF-DIAGNOSTICS AND REMOTE TEST (SBRT OPTION): Automatic 24-hour recharge after a 90-minute discharge. Advanced electrical design provides constant light output throughout the entire discharge period for non-CW batteries. For cold weather and cold temperature applications, the light may dim through the discharge cycle. Remote test is automatically controlled by emergency mode when supply voltage drops below approximately 80 percent nominal of 120, 220, 277 or 347. Other input voltages may vary. AC LED re-start allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Self-Diagnostics: Continuously monitors AC functionality. Standard derangement monitoring will indicate disconnected battery, charger failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state-charging, test activation and three-state self-diagnostics.

Self-Diagnostics testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of amps, AC to DC converter, battery charging and condition of microprocessor. Automatic test is ready programmed for eight hours by activating manual test switch or use of remote tester (RXTK accessory).

Manual testing: Test switch and remote tester (RXTK accessory) provides manual activation of 60-second diagnostic testing for on-demand diagnosis. 90-minute manual testing can be enabled by pressing the test switch again while in test mode.

INSTALLATION — Wall mount; typically meets 7.5 to 14' mounting height from ground or floor. Power supplied by either mounting directly to a 4" square or 4" octagon j-box (wall mount) and accepts rigid or conduit.

LISTINGS — UL wet location listed standard at 32-122°F (0-50°C). Unit with CW battery (cold weather) listed for 22°F to 122°F (30° to 50°C). Remote listed for 40°F to 122°F (40° to 50°C). Meets or exceeds all applicable requirements for UL 368, NFPA 701 (Current, Life Safety code, NFPA 70 NEC, NFPA 70E, NFPA 70E Electrical Handbook, California Energy Commission Title 20 section 1605.3.1 (WV), IFC Title 47, Part 13, Subpart 8 and DSHA. List and label to comply with Canadian Standards C22.2 No. 141-10.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.lithonia.com/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

1 Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.

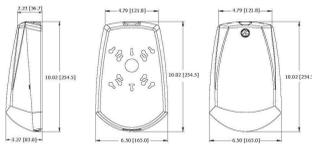
Catalog Number
Notes
Type
EM

AFFINITY®

Premium Die-Cast Architectural Emergency Light



Mounting
All dimensions are inches (roundness).
Shipping weight: 3.5 lbs. (1.59 kg).



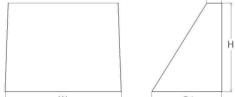
EMERGENCY

WDGE2 LED Architectural Wall Sconce Precision Refractive Optic



Specifications

Depth (D1): 7"
Depth (D2): 1.5"
Height: 9"
Width: 11.5"
Weight: 13.5 lbs (without options)



Catalog Number
Notes
Type
SFE

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Introduction
The WDGE2 LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean, rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE2 family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian safe applications in any environment.

WDGE LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -20°C	Sensor	P0	P1	P2	P3	P4	P5	P6
WDGE2 LED	Visual Comfort	4W	--	--	750	1,200	2,000	--	--	--	--
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000	--
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--	--
WDGE2 LED	Precision Refractive	15W	18W	Standalone / nLight	--	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	Precision Refractive	15W	18W	Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped separately
WDGE2 LED	P0 ¹	27K 2700K	90CR ²	T1S Type I Short	MVOLT	Shipped included	AWS 3/8" x 3/8" Architectural wall spacer
	P1 ¹	30K 3000K	90CR ²	T2M Type II Medium	347 ³	Shipped included	PBW Surface-mounted back box (rig, top, right, and bottom) (see below for details)
	P2 ¹	40K 4000K	90CR ²	UV Limited 11°/16°	480 ⁴	Shipped separately	PBW Indirect Canopy (only Water-tight design) (see below for details)
	P3 ¹	50K 5000K	90CR ²	T3M Type III Medium	480 ⁴	Shipped separately	PBW Indirect Canopy (only Water-tight design) (see below for details)
	P4 ¹	AMB Amber	90CR ²	T4M Type IV Medium	480 ⁴	Shipped separately	PBW Indirect Canopy (only Water-tight design) (see below for details)

EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Options	Finish
E1WH1 Emergency battery backup. Certified in CA Title 20 APPE20S (10W, 3°C min)	DLRDK Dark bronze
E1WC1 Emergency battery backup. Certified in CA Title 20 APPE20S (10W, 3°C min)	DLRDL Black
PE ¹ Photo-circuit. Backlight type	DLRDA Natural aluminum
D1 ¹ 0-10V dimming when pulled outside fixture (for use with external controls, ordered separately)	DWRD White
RCE Battery-recharge energy back (PBBM). Total of 4 entry points.	DLRDB Textured dark bronze
BAA Buy American/AC Compliant	DLRDX Textured black
	DLRDI Textured natural aluminum
	DWRKID Textured white
	DS7D0 Textured sandstone

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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COMMERCIAL OUTDOOR

WDGE2 LED
Rev. 03/20/22



FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices. **CONSTRUCTION** — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by tension springs. Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment. Two combination 1/2" x 3/4" and four 1/2" knockouts for straight through conduit runs. Capacity: 8 (4 in, 4 out), No. 12, RMC conductors, rated for 99°C.

ACCOMMODATES 12"-24" just spacing.

Passive cooling thermal management for 25°C standard, high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are housed in a 3-step 300K, 80 CR minimum, 90 CR optional.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.8:1 beam and 52° out-to-source and source in angle.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

ELECTRICAL — Multi-wire (120/277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

70% lumen maintenance at 60,000 hours.

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IES listed. DLR® 51M¹ certified product.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

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Catalog Number
Notes
Type
SGE



6" OPEN and WALLWASH LED Non-IC New Construction Downlight



Options:
N01¹ 0-10V dimmer drivers to 10%
N1W¹ 0-10V dimmer drivers to 1%
G21 0-10V e-LED driver
G22 0-10V e-LED driver
D1¹ 0-10V dimming when pulled outside fixture (for use with external controls, ordered separately)
RCE Battery-recharge energy back (PBBM). Total of 4 entry points.
BAA Buy American/AC Compliant

Series	Color Temperature	Lumens ²	Aperture/Trim Color	Finish	Voltage
LDNG	27 ³ 2700K	05 5000 lumens	25 2500 lumens	LS Semi-specular	MVOLT Multi-volt
	30 ³ 3000K	10 1000 lumens	30 3000 lumens	LD Matte diffuse	120 120V
	35 ³ 3500K	15 1500 lumens	40 4000 lumens	WR White	200
	40 ³ 4000K	20 2000 lumens	40 4000 lumens	BR Black	277 277V
	50 ³ 5000K	20 2000 lumens	50 5000 lumens	LS Specular	347 ³ 347V

Options	Finish
G210 0-10V dimmer drivers to 10%	N01 ¹ 0-10V dimmer drivers to 10%
G211 0-10V dimmer drivers to 1%	N1W ¹ 0-10V dimmer drivers to 1%
D1 ¹ 0-10V dimming when pulled outside fixture (for use with external controls, ordered separately)	RBL ¹ Black painted flange
RCE Battery-recharge energy back (PBBM). Total of 4 entry points.	SRM Black painted flange
BAA Buy American/AC Compliant	SRM Emergency battery pack with integral test switch, 10W Constant Power, Not Certified in CA Title 20 MAEBIS
	ELB ¹ Emergency battery pack with remote test switch, 10W Constant Power, Not Certified in CA Title 20 MAEBIS
	ELSD ¹ Emergency battery pack with 10W Constant Power, Not Certified in CA Title 20 MAEBIS
	ELSDP ¹ Emergency battery pack with 10W Constant Power, Not Certified in CA Title 20 MAEBIS
	E1WH1 0-10V e-LED driver with 10W Constant Power, Not Certified in CA Title 20 MAEBIS
	E1WC1 0-10V e-LED driver with 10W Constant Power, Not Certified in CA Title 20 MAEBIS
	E1WVCR ¹ Emergency battery pack with 10W Constant Power with remote test switch. Certified in CA Title 20 MAEBIS
	NFP160 ¹ nLight ¹ network power/relay pack with 0-10V dimming for non-e-LED drivers (G210, G211)
	NFP160R ¹ nLight ¹ network power/relay pack with 0-10V dimming for non-e-LED drivers (G210, G211). ER controls feature on emergency circuit.

Accessories: Order as specified on this number:
P80MSP EMC Power Supply battery pack, ETL compliant, field installable, 10W constant power
P80MSP375 Compact interruptible emergency AC power system
EAC DSM 125 Compact interruptible emergency AC power system
GR48J2 Oversized trim ring with 8" outside diameter
SCA Sloped ceiling adapter. Refer to E1CESCA for more options.

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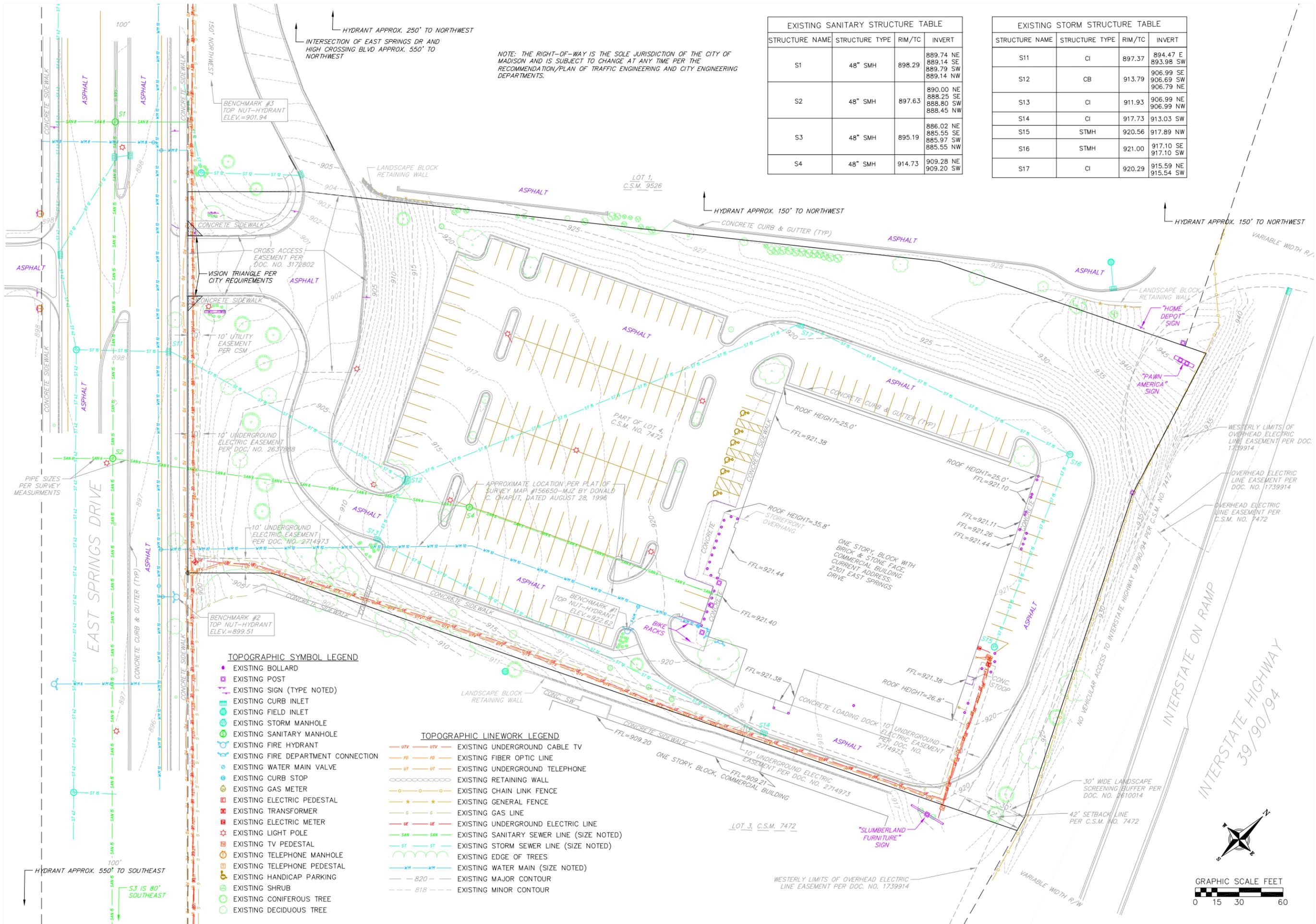
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TOPOGRAPHIC SYMBOL LEGEND

- EXISTING BOLLARD
- EXISTING POST
- ▲ EXISTING SIGN (TYPE NOTED)
- EXISTING CURB INLET
- EXISTING FIELD INLET
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING FIRE DEPARTMENT CONNECTION
- EXISTING WATER MAIN VALVE
- EXISTING CURB STOP
- EXISTING GAS METER
- EXISTING ELECTRIC PEDESTAL
- EXISTING TRANSFORMER
- EXISTING ELECTRIC METER
- EXISTING LIGHT POLE
- EXISTING TV PEDESTAL
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING HANDICAP PARKING
- EXISTING SHRUB
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE

TOPOGRAPHIC LINEWORK LEGEND

- UV — EXISTING UNDERGROUND CABLE TV
- FO — EXISTING FIBER OPTIC LINE
- UT — EXISTING UNDERGROUND TELEPHONE
- ○ — EXISTING RETAINING WALL
- ○ — EXISTING CHAIN LINK FENCE
- * — EXISTING GENERAL FENCE
- G — EXISTING GAS LINE
- UE — EXISTING UNDERGROUND ELECTRIC LINE
- SAN — EXISTING SANITARY SEWER LINE (SIZE NOTED)
- ST — EXISTING STORM SEWER LINE (SIZE NOTED)
- WM — EXISTING EDGE OF TREES
- WM — EXISTING WATER MAIN (SIZE NOTED)
- 820 — EXISTING MAJOR CONTOUR
- 818 — EXISTING MINOR CONTOUR

EXISTING SANITARY STRUCTURE TABLE

STRUCTURE NAME	STRUCTURE TYPE	RIM/TC	INVERT
S1	48" SMH	898.29	889.74 NE 889.14 SE 889.79 SW 889.14 NW
S2	48" SMH	897.63	890.00 NE 888.25 SE 888.80 SW 888.45 NW
S3	48" SMH	895.19	886.02 NE 885.55 SE 885.97 SW 885.55 NW
S4	48" SMH	914.73	909.28 NE 909.20 SW

EXISTING STORM STRUCTURE TABLE

STRUCTURE NAME	STRUCTURE TYPE	RIM/TC	INVERT
S11	CI	897.37	894.47 E 893.98 SW
S12	CB	913.79	906.99 SE 906.69 SW 906.79 NE
S13	CI	911.93	906.99 NE 906.99 NW
S14	CI	917.73	913.03 SW
S15	STMH	920.56	917.89 NW
S16	STMH	921.00	917.10 SE 917.10 SW
S17	CI	920.29	915.59 NE 915.54 SW



Hawkeye Hotels

designcell ARCHITECTURE
1785 VILLAGE CENTER CIRCLE SUITE 100
LAS VEGAS, NV 89134 T. 702.403.1575
WWW.DESIGNCELL.COM

8/22/2022

PRELIMINARY DESIGN

HOME2 SUITES & TRU DUAL
BRAND BY HILTON
5-STORY, 219 GUESTROOMS
2403 EAST SPRINGS DRIVE, MADISON, WI 53704

PROJECT NUMBER: 18 068

PHOTOMETRIC
STUDY

DR_P1.0

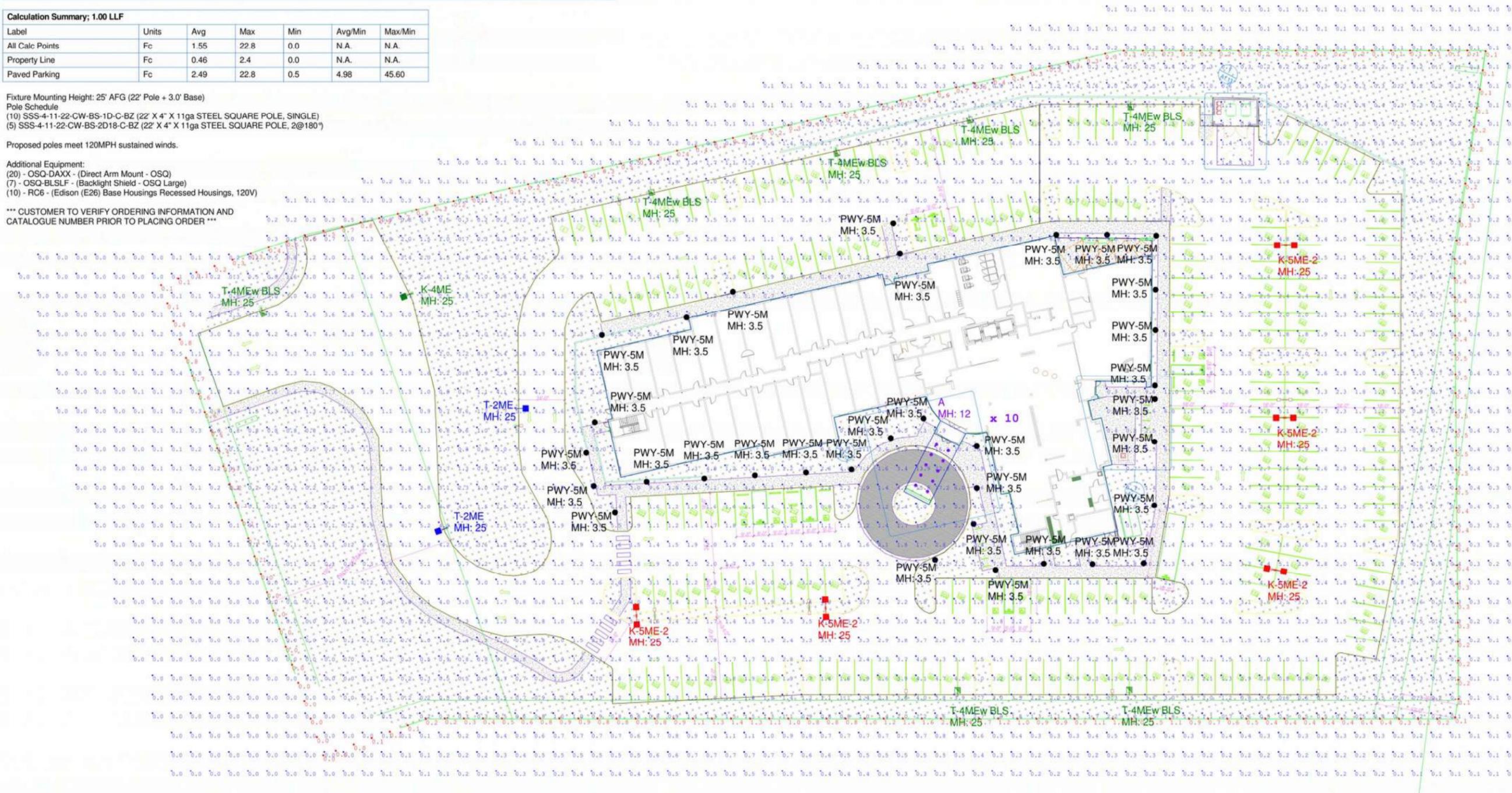
Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number
	1	K-4ME	SINGLE	1.000	16959	130	OSQ-A-NM-4ME-K-40K-UL-XX w/OSQ-DAXX
	2	T-2ME	SINGLE	1.000	21902	166	OSQ-A-NM-2ME-T-40K-UL-XX w/OSQ-DAXX
	7	T-4MEw BLS	SINGLE	1.000	16830	166	OSQ-A-NM-4ME-T-40K-UL-XX w/OSQ-DAXX OSQ-BLSLF
	5	K-5ME-2	2 @ 180°	1.000	15999	130	OSQ-A-NM-5ME-K-40K-UL-XX w/OSQ-DAXX
	10	A	SINGLE	1.000	1600	21	CR6T-1600L-40K-P-12-E26GU24
	33	PWY-5M	SINGLE	1.000	1666	22	PWY-EDG-5M-P4-02-E-UL-XX-350-40K

Calculation Summary: 1.00 LLF						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
All Calc Points	Fc	1.55	22.8	0.0	N.A.	N.A.
Property Line	Fc	0.46	2.4	0.0	N.A.	N.A.
Paved Parking	Fc	2.49	22.8	0.5	4.98	45.60

Fixture Mounting Height: 25' AFG (22' Pole + 3.0' Base)
 Pole Schedule
 (10) SSS-4-11-22-CW-BS-1D-C-BZ (22' X 4" X 11ga STEEL SQUARE POLE, SINGLE)
 (5) SSS-4-11-22-CW-BS-2D18-C-BZ (22' X 4" X 11ga STEEL SQUARE POLE, 2@180°)

Proposed poles meet 120MPH sustained winds.
 Additional Equipment:
 (20) - OSQ-DAXX - (Direct Arm Mount - OSQ)
 (7) - OSQ-BLSLF - (Backlight Shield - OSQ Large)
 (10) - RC6 - (Edison (E26) Base Housings Recessed Housings, 120V)

*** CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER ***



illumination results shown on this lighting design are based on project parameters provided to Cree Lighting used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting or energy code.

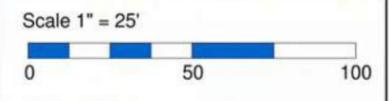
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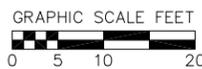
SR-36647

Footcandles calculated at grade

Filename: 190430HT1JEER3.AGI

Layout By:
Collin Witherow
Date: 2/18/2020





5-STORY BUILDING

LIGHT BOLLARD. SEE ELECTRICAL PLANS FOR FINAL DETAILS (TYP.)

CURBED SIDEWALK (TYP.)

22 BIKE STALLS 2'X6' ROUND RACK, BY DERO. CONFIRM PRODUCT SELECTION WITH OWNER.

ADA PARKING SIGN (TYP.)

WHEEL STOP (TYP.)

COLORLED STAMPED CONCRETE, OR APPROVED ALTERNATIVE. CONFIRM PRODUCT SELECTION WITH OWNER. (TYP.)

FREE STANDING WALL, FENCING AND PATIO AREA. REFER TO STRUCTURAL & ARCHITECTURAL PLAN. (TYP.)

BEGIN TAPERING CURB HEAD FROM 6" TO 0"

8.0' TYP.

TAPER CURB HEAD FROM 6" TO 0" OVER A MINIMUM OF 6 FEET

9.0' TYP.

R10.0'

TAPER CURB HEAD FROM 6" TO 0" OVER A MINIMUM OF 6 FEET

R10.0'

BEGIN TRANSITION FROM REJECT CURB TO TYPICAL CURB

TAPER CURB HEAD FROM 6" TO 0" OVER A MINIMUM OF 6 FEET

4.5' CONCRETE RIBBON CURB

R15.0'

FLAG POLE (DESIGN BY OTHERS). CONFIRM LOCATION WITH OWNER.

CONCRETE EQUIPMENT PAD.

TAPER CURB HEAD FROM 6" TO 0" OVER A MINIMUM OF 6 FEET

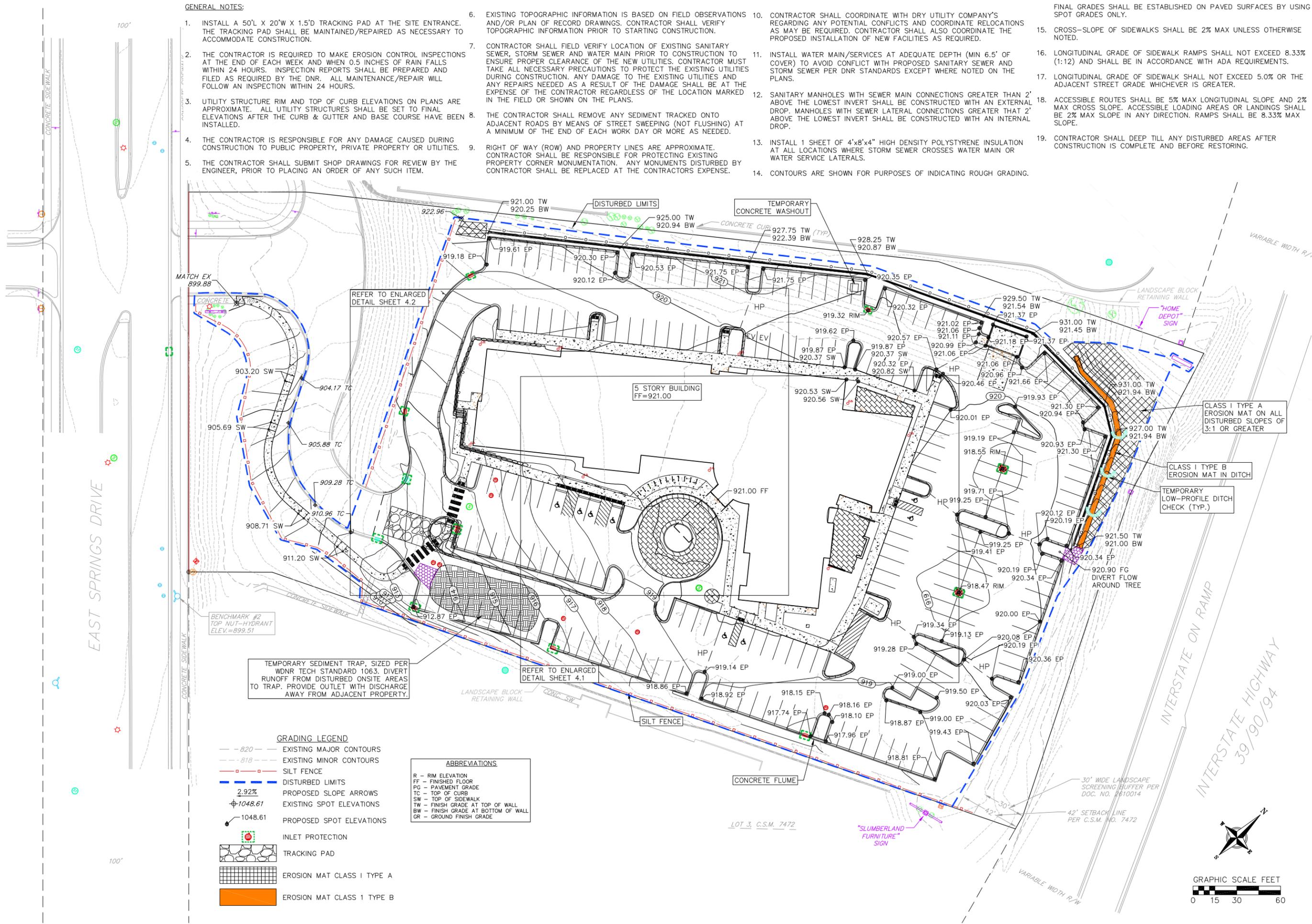
CURBED SIDEWALK

LOADING ZONE

05 Aug 2022 - 11:54a M:\Hawkeye Hotels\180375_2301 E Springs Dr\CADD\180375 - Base.dwg by: cbn

GENERAL NOTES:

- INSTALL A 50'L X 20'W X 1.5'D TRACKING PAD AT THE SITE ENTRANCE. THE TRACKING PAD SHALL BE MAINTAINED/REPAIRED AS NECESSARY TO ACCOMMODATE CONSTRUCTION.
- THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR. ALL MAINTENANCE/REPAIR WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
- UTILITY STRUCTURE RIM AND TOP OF CURB ELEVATIONS ON PLANS ARE APPROXIMATE. ALL UTILITY STRUCTURES SHALL BE SET TO FINAL ELEVATIONS AFTER THE CURB & GUTTER AND BASE COURSE HAVE BEEN INSTALLED.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING CONSTRUCTION TO PUBLIC PROPERTY, PRIVATE PROPERTY OR UTILITIES.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER, PRIOR TO PLACING AN ORDER OF ANY SUCH ITEM.
- EXISTING TOPOGRAPHIC INFORMATION IS BASED ON FIELD OBSERVATIONS AND/OR PLAN OF RECORD DRAWINGS. CONTRACTOR SHALL VERIFY TOPOGRAPHIC INFORMATION PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING SANITARY SEWER, STORM SEWER AND WATER MAIN PRIOR TO CONSTRUCTION TO ENSURE PROPER CLEARANCE OF THE NEW UTILITIES. CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO THE EXISTING UTILITIES AND ANY REPAIRS NEEDED AS A RESULT OF THE DAMAGE SHALL BE AT THE EXPENSE OF THE CONTRACTOR REGARDLESS OF THE LOCATION MARKED IN THE FIELD OR SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL REMOVE ANY SEDIMENT TRACKED ONTO ADJACENT ROADS BY MEANS OF STREET SWEEPING (NOT FLUSHING) AT A MINIMUM OF THE END OF EACH WORK DAY OR MORE AS NEEDED.
- RIGHT OF WAY (ROW) AND PROPERTY LINES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING PROPERTY CORNER MONUMENTATION. ANY MONUMENTS DISTURBED BY CONTRACTOR SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
- CONTRACTOR SHALL COORDINATE WITH DRY UTILITY COMPANY'S REGARDING ANY POTENTIAL CONFLICTS AND COORDINATE RELOCATIONS AS MAY BE REQUIRED. CONTRACTOR SHALL ALSO COORDINATE THE PROPOSED INSTALLATION OF NEW FACILITIES AS REQUIRED.
- INSTALL WATER MAIN/SERVICES AT ADEQUATE DEPTH (MIN 6.5' OF COVER) TO AVOID CONFLICT WITH PROPOSED SANITARY SEWER AND STORM SEWER PER DNR STANDARDS EXCEPT WHERE NOTED ON THE PLANS.
- SANITARY MANHOLES WITH SEWER MAIN CONNECTIONS GREATER THAN 2' ABOVE THE LOWEST INVERT SHALL BE CONSTRUCTED WITH AN EXTERNAL DROP. MANHOLES WITH SEWER LATERAL CONNECTIONS GREATER THAN 2' ABOVE THE LOWEST INVERT SHALL BE CONSTRUCTED WITH AN INTERNAL DROP.
- INSTALL 1 SHEET OF 4'x8'x4" HIGH DENSITY POLYSTYRENE INSULATION AT ALL LOCATIONS WHERE STORM SEWER CROSSES WATER MAIN OR WATER SERVICE LATERALS.
- CONTOURS ARE SHOWN FOR PURPOSES OF INDICATING ROUGH GRADING.
- FINAL GRADES SHALL BE ESTABLISHED ON PAVED SURFACES BY USING SPOT GRADES ONLY.
- CROSS-SLOPE OF SIDEWALKS SHALL BE 2% MAX UNLESS OTHERWISE NOTED.
- LONGITUDINAL GRADE OF SIDEWALK RAMPS SHALL NOT EXCEED 8.33% (1:12) AND SHALL BE IN ACCORDANCE WITH ADA REQUIREMENTS.
- LONGITUDINAL GRADE OF SIDEWALK SHALL NOT EXCEED 5.0% OR THE ADJACENT STREET GRADE WHICHEVER IS GREATER.
- ACCESSIBLE ROUTES SHALL BE 5% MAX LONGITUDINAL SLOPE AND 2% MAX CROSS SLOPE. ACCESSIBLE LOADING AREAS OR LANDINGS SHALL BE 2% MAX SLOPE IN ANY DIRECTION. RAMPS SHALL BE 8.33% MAX SLOPE.
- CONTRACTOR SHALL DEEP TILL ANY DISTURBED AREAS AFTER CONSTRUCTION IS COMPLETE AND BEFORE RESTORING.



GRADING LEGEND

- - 820 - - EXISTING MAJOR CONTOURS
- - 818 - - EXISTING MINOR CONTOURS
- - - - SILT FENCE
- - - - DISTURBED LIMITS
- 2.92% PROPOSED SLOPE ARROWS
- 1048.61 EXISTING SPOT ELEVATIONS
- 1048.61 PROPOSED SPOT ELEVATIONS
- INLET PROTECTION
- TRACKING PAD
- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS 1 TYPE B

ABBREVIATIONS

- R - RIM ELEVATION
- FF - FINISHED FLOOR
- PG - PAVEMENT GRADE
- TC - TOP OF CURB
- SW - TOP OF SIDEWALK
- TW - FINISH GRADE AT TOP OF WALL
- BW - FINISH GRADE AT BOTTOM OF WALL
- GR - GROUND FINISH GRADE

TEMPORARY SEDIMENT TRAP, SIZED PER WDNR TECH STANDARD 1063. DIVERT RUNOFF FROM DISTURBED ONSITE AREAS TO TRAP. PROVIDE OUTLET WITH DISCHARGE AWAY FROM ADJACENT PROPERTY.

CLASS I TYPE A EROSION MAT ON ALL DISTURBED SLOPES OF 3:1 OR GREATER

CLASS I TYPE B EROSION MAT IN DITCH

TEMPORARY LOW-PROFILE DITCH CHECK (TYP.)

30' WIDE LANDSCAPE SCREENING BUFFER PER DOC. NO. 2610014

42' SETBACK LINE PER C.S.M. NO. 7472

LOT 3, C.S.M. 7472

30' WIDE LANDSCAPE SCREENING BUFFER PER DOC. NO. 2610014

42' SETBACK LINE PER C.S.M. NO. 7472

designcell ARCHITECTURE
 1725 VILLAGE CENTER CIRCLE #110
 LAS VEGAS, NV 89134, T. 702.403.1519
 WWW.DESIGNCELL.COM

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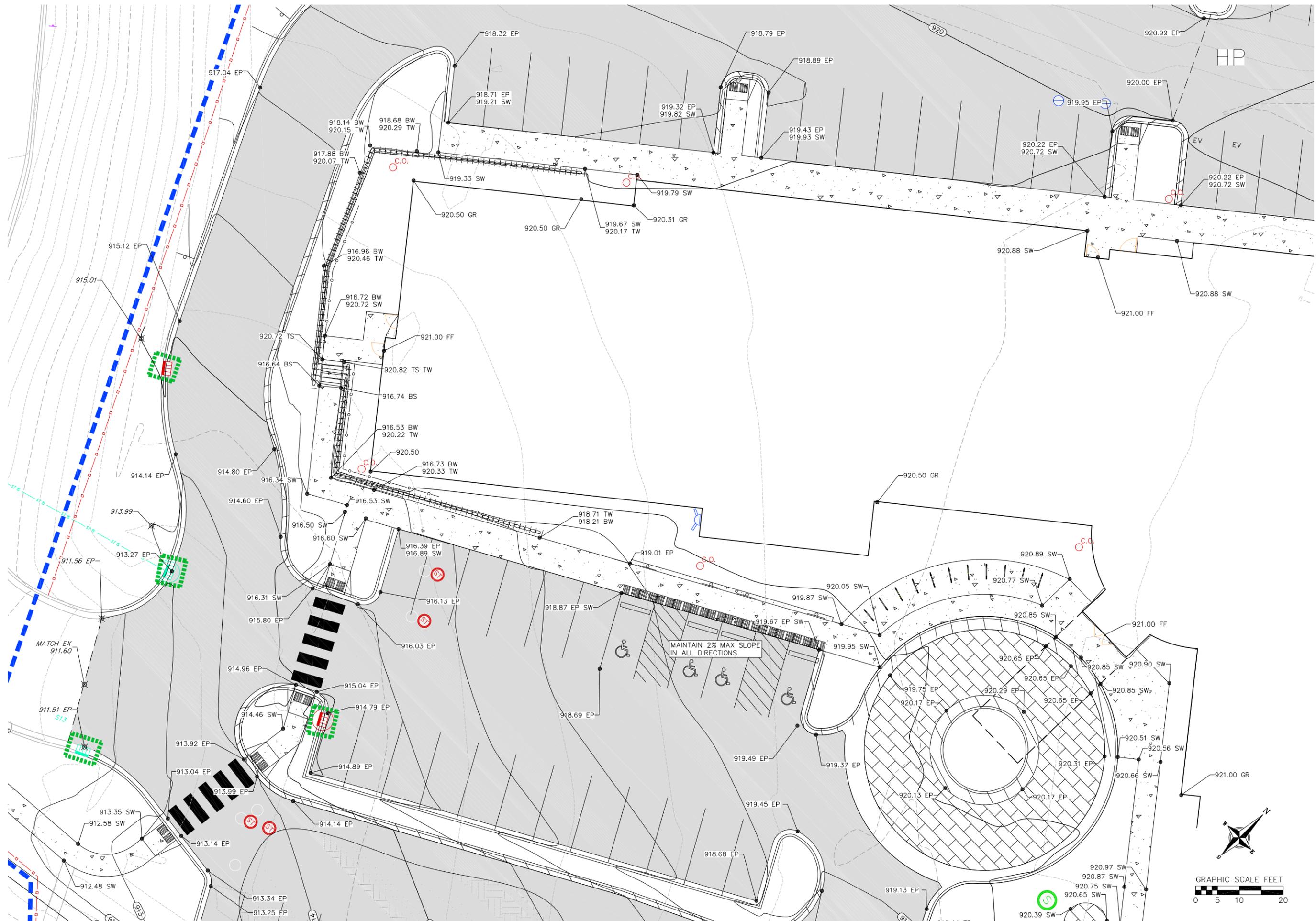
HOME2 SUITES & TRU BY HILTON
 5-STORY, 219 GUESTROOMS

2403 EAST SPRINGS DR., MADISON, WI 53704

PROJECT NUMBER: 18 068

GRADING AND EROSION CONTROL PLAN

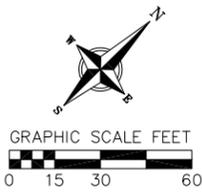
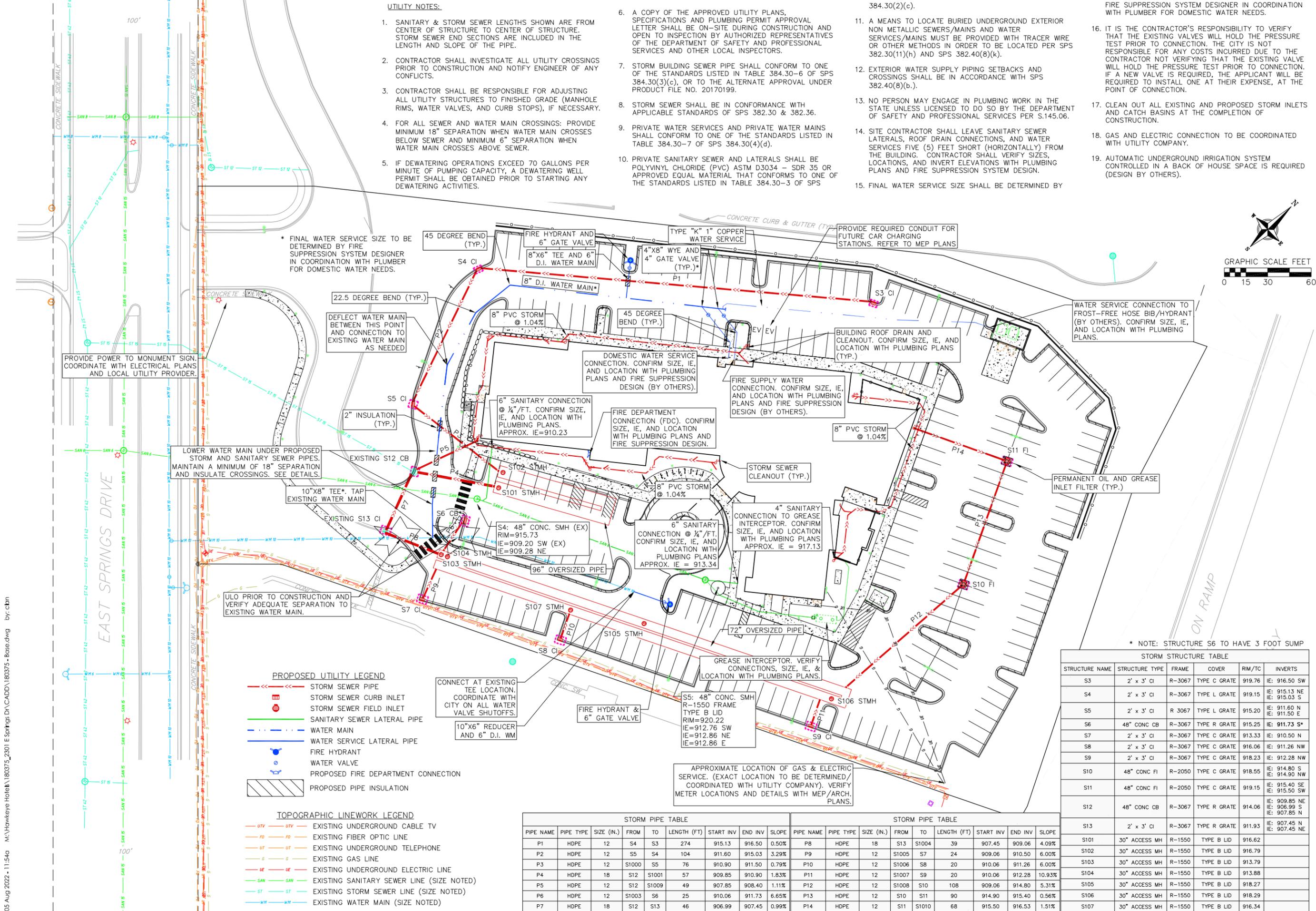
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UTILITY NOTES:

- SANITARY & STORM SEWER LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. STORM SEWER END SECTIONS ARE INCLUDED IN THE LENGTH AND SLOPE OF THE PIPE.
- CONTRACTOR SHALL INVESTIGATE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL UTILITY STRUCTURES TO FINISHED GRADE (MANHOLE RIMS, WATER VALVES, AND CURB STOPS), IF NECESSARY.
- FOR ALL SEWER AND WATER MAIN CROSSINGS: PROVIDE MINIMUM 18" SEPARATION WHEN WATER MAIN CROSSES BELOW SEWER AND MINIMUM 6" SEPARATION WHEN WATER MAIN CROSSES ABOVE SEWER.
- IF DEWATERING OPERATIONS EXCEED 70 GALLONS PER MINUTE OF PUMPING CAPACITY, A DEWATERING WELL PERMIT SHALL BE OBTAINED PRIOR TO STARTING ANY DEWATERING ACTIVITIES.
- A COPY OF THE APPROVED UTILITY PLANS, SPECIFICATIONS AND PLUMBING PERMIT APPROVAL LETTER SHALL BE ON-SITE DURING CONSTRUCTION AND OPEN TO INSPECTION BY AUTHORIZED REPRESENTATIVES OF THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES AND OTHER LOCAL INSPECTORS.
- STORM BUILDING SEWER PIPE SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-6 OF SPS 384.30(3)(c), OR TO THE ALTERNATE APPROVAL UNDER PRODUCT FILE NO. 20170199.
- STORM SEWER SHALL BE IN CONFORMANCE WITH APPLICABLE STANDARDS OF SPS 382.30 & 382.36.
- PRIVATE WATER SERVICES AND PRIVATE WATER MAINS SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-7 OF SPS 384.30(4)(d).
- PRIVATE SANITARY SEWER AND LATERALS SHALL BE POLYVINYL CHLORIDE (PVC) ASTM D3034 - SDR 35 OR APPROVED EQUAL MATERIAL THAT CONFORMS TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-3 OF SPS 384.30(2)(c).

- A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS AND WATER SERVICES/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED PER SPS 382.30(11)(h) AND SPS 382.40(8)(k).
- EXTERIOR WATER SUPPLY PIPING SETBACKS AND CROSSINGS SHALL BE IN ACCORDANCE WITH SPS 382.40(8)(b.).
- NO PERSON MAY ENGAGE IN PLUMBING WORK IN THE STATE UNLESS LICENSED TO DO SO BY THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PER S.145.06.
- SITE CONTRACTOR SHALL LEAVE SANITARY SEWER LATERALS, ROOF DRAIN CONNECTIONS, AND WATER SERVICES FIVE (5) FEET SHORT (HORIZONTALLY) FROM THE BUILDING. CONTRACTOR SHALL VERIFY SIZES, LOCATIONS, AND INVERT ELEVATIONS WITH PLUMBING PLANS AND FIRE SUPPRESSION SYSTEM DESIGN.
- FINAL WATER SERVICE SIZE SHALL BE DETERMINED BY FIRE SUPPRESSION SYSTEM DESIGNER IN COORDINATION WITH PLUMBER FOR DOMESTIC WATER NEEDS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE EXISTING VALVES WILL HOLD THE PRESSURE TEST PRIOR TO CONNECTION. THE CITY IS NOT RESPONSIBLE FOR ANY COSTS INCURRED DUE TO THE CONTRACTOR NOT VERIFYING THAT THE EXISTING VALVE WILL HOLD THE PRESSURE TEST PRIOR TO CONNECTION. IF A NEW VALVE IS REQUIRED, THE APPLICANT WILL BE REQUIRED TO INSTALL ONE AT THEIR EXPENSE, AT THE POINT OF CONNECTION.
- CLEAN OUT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS AT THE COMPLETION OF CONSTRUCTION.
- GAS AND ELECTRIC CONNECTION TO BE COORDINATED WITH UTILITY COMPANY.
- AUTOMATIC UNDERGROUND IRRIGATION SYSTEM CONTROLLED IN A BACK OF HOUSE SPACE IS REQUIRED (DESIGN BY OTHERS).



- PROPOSED UTILITY LEGEND**
- STORM SEWER PIPE
 - STORM SEWER CURB INLET
 - STORM SEWER FIELD INLET
 - SANITARY SEWER LATERAL PIPE
 - WATER MAIN
 - WATER SERVICE LATERAL PIPE
 - FIRE HYDRANT
 - WATER VALVE
 - PROPOSED FIRE DEPARTMENT CONNECTION
 - PROPOSED PIPE INSULATION

- TOPOGRAPHIC LINEWORK LEGEND**
- UTV EXISTING UNDERGROUND CABLE TV
 - FO EXISTING FIBER OPTIC LINE
 - UT EXISTING UNDERGROUND TELEPHONE
 - G EXISTING GAS LINE
 - UE EXISTING UNDERGROUND ELECTRIC LINE
 - SAN EXISTING SANITARY SEWER LINE (SIZE NOTED)
 - ST EXISTING STORM SEWER LINE (SIZE NOTED)
 - WM EXISTING WATER MAIN (SIZE NOTED)

STORM PIPE TABLE							STORM PIPE TABLE						
PIPE NAME	PIPE TYPE	SIZE (IN.)	FROM	TO	LENGTH (FT)	SLOPE	PIPE NAME	PIPE TYPE	SIZE (IN.)	FROM	TO	LENGTH (FT)	SLOPE
P1	HDPE	12	S4	S3	274	915.13	P8	HDPE	18	S13	S1004	39	907.45
P2	HDPE	12	S5	S4	104	911.60	P9	HDPE	12	S1005	S7	24	909.06
P3	HDPE	12	S1000	S5	76	910.90	P10	HDPE	12	S1006	S8	20	910.06
P4	HDPE	18	S12	S1001	57	909.85	P11	HDPE	12	S1007	S9	20	910.06
P5	HDPE	12	S12	S1009	49	907.85	P12	HDPE	12	S1008	S10	108	909.06
P6	HDPE	12	S1003	S6	25	910.06	P13	HDPE	12	S10	S11	90	914.90
P7	HDPE	18	S12	S13	46	906.99	P14	HDPE	12	S11	S1010	68	915.50

STORM STRUCTURE TABLE					
STRUCTURE NAME	STRUCTURE TYPE	FRAME	COVER	RIM/TC	INVERTS
S3	2' x 3' CI	R-3067	TYPE C GRATE	919.76	IE: 916.50 SW IE: 915.13 NE IE: 915.03 S
S4	2' x 3' CI	R-3067	TYPE L GRATE	919.15	IE: 911.60 N IE: 911.50 E
S5	2' x 3' CI	R-3067	TYPE L GRATE	915.20	IE: 911.73 S*
S6	48" CONC CB	R-3067	TYPE R GRATE	915.25	IE: 910.50 N
S7	2' x 3' CI	R-3067	TYPE C GRATE	913.33	IE: 911.26 NW
S8	2' x 3' CI	R-3067	TYPE C GRATE	916.06	IE: 912.28 NW
S9	2' x 3' CI	R-3067	TYPE C GRATE	918.23	IE: 914.80 S IE: 914.90 NW
S10	48" CONC FI	R-2050	TYPE C GRATE	918.55	IE: 915.40 SE IE: 915.50 SW
S11	48" CONC FI	R-2050	TYPE C GRATE	919.15	IE: 909.85 NE IE: 906.99 S IE: 907.85 N
S12	48" CONC CB	R-3067	TYPE R GRATE	914.06	IE: 907.45 N IE: 907.45 NE
S13	2' x 3' CI	R-3067	TYPE R GRATE	911.93	
S101	30" ACCESS MH	R-1550	TYPE B LID	916.62	
S102	30" ACCESS MH	R-1550	TYPE B LID	916.79	
S103	30" ACCESS MH	R-1550	TYPE B LID	913.79	
S104	30" ACCESS MH	R-1550	TYPE B LID	913.88	
S105	30" ACCESS MH	R-1550	TYPE B LID	918.27	
S106	30" ACCESS MH	R-1550	TYPE B LID	918.29	
S107	30" ACCESS MH	R-1550	TYPE B LID	916.34	

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PROJECT NUMBER: 18 068

UTILITY PLAN

C5.0

EROSION CONTROL MEASURES

1. EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE CITY OF MADISON EROSION CONTROL ORDINANCE AND CHAPTER NR 216 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARDS (<http://dnr.wi.gov/runoff/stormwater/techstds.htm>) AND WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.
3. INSTALL SEDIMENT CONTROL PRACTICES (TRACKING PAD, PERIMETER SILT FENCE, SEDIMENT BASINS, ETC.) PRIOR TO INITIATING OTHER LAND DISTURBING CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR AND/OR CITY. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
5. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
6. A 3" CLEAR STONE TRACKING PAD SHALL BE INSTALLED AT THE END OF ROAD CONSTRUCTION LIMITS TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE ADJACENT PAVED PUBLIC ROADWAY. SEDIMENT TRACKING PAD SHALL CONFORM TO WISDNR TECHNICAL STANDARD 1057. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORK DAY.
7. **CHANNELIZED RUNOFF:** FROM ADJACENT AREAS PASSING THROUGH THE SITE SHALL BE DIVERTED AROUND DISTURBED AREAS.
8. **STABILIZED DISTURBED GROUND:** ANY SOIL OR DIRT PILES WHICH WILL REMAIN IN EXISTENCE FOR MORE THAN 7-CONSECUTIVE DAYS, WHETHER TO BE WORKED DURING THAT PERIOD OR NOT, SHALL NOT BE LOCATED WITHIN 25- FEET OF ANY ROADWAY, PARKING LOT, PAVED AREA, OR DRAINAGE STRUCTURE OR CHANNEL (UNLESS INTENDED TO BE USED AS PART OF THE EROSION CONTROL MEASURES). TEMPORARY STABILIZATION AND CONTROL MEASURES (SEEDING, MULCHING, TARPING, EROSION MATTING, BARRIER FENCING, ETC.) ARE REQUIRED FOR THE PROTECTION OF DISTURBED AREAS AND SOIL PILES, WHICH WILL REMAIN UN-WORKED FOR A PERIOD OF MORE THAN 14-CONSECUTIVE CALENDAR DAYS. THESE MEASURES SHALL REMAIN IN PLACE UNTIL SITE HAS STABILIZED.
9. **SITE DE-WATERING:** WATER PUMPED FROM THE SITE SHALL BE TREATED BY TEMPORARY SEDIMENTATION BASINS OR OTHER APPROPRIATE CONTROL MEASURES. SEDIMENTATION BASINS SHALL HAVE A DEPTH OF AT LEAST 3 FEET, BE SURROUNDED BY SNOWFENCE OR EQUIVALENT BARRIER AND HAVE SUFFICIENT SURFACE AREA TO PROVIDE A SURFACE SETTLING RATE OF NO MORE THAN 750 GALLONS PER SQUARE FOOT PER DAY AT THE HIGHEST DEWATERING PUMPING RATE. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, A NEIGHBORING SITE, OR THE BED OR BANKS OF THE RECEIVING WATER. POLYMERS MAY BE USED AS DIRECTED BY DNR TECHNICAL STANDARD 1061 (DE-WATERING).
10. SEE DETAIL SHEETS FOR RIP-RAP SIZING. IN NO CASE WILL RIP-RAP BE SMALLER THAN 3" TO 6".
11. INLET FILTERS ARE TO BE PLACED IN STORMWATER INLET STRUCTURES AS SOON AS THEY ARE INSTALLED. ALL PROJECT AREA STORM INLETS NEED WISCONSIN D.O.T. TYPE D INLET PROTECTION. THE FILTERS SHALL BE MAINTAINED UNTIL THE CITY HAS ACCEPTED THE BINDER COURSE OF ASPHALT.
12. RESTORATION (SEED, FERTILIZER AND MULCH) SHALL BE PER SPECIFICATIONS ON THIS SHEET, UNLESS SPECIAL RESTORATION IS CALLED FOR ON THE LANDSCAPE PLAN OR THE BASIN DETAIL SHEET..
13. SEED, FERTILIZER AND MULCH SHALL BE APPLIED WITHIN 7 DAYS AFTER FINAL GRADE HAS BEEN ESTABLISHED. IF DISTURBED AREAS WILL NOT BE RESTORED IMMEDIATELY AFTER ROUGH GRADING, TEMPORARY SEED SHALL BE PLACED.
14. FOR THE FIRST SIX WEEKS AFTER RESTORATION (E.G. SEED & MULCH, EROSION MAT, SOD) OF A DISTURBED AREA, INCLUDE SUMMER WATERING PROVISIONS OF ALL NEWLY SEEDED AND MULCHED AREAS WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
15. EROSION MAT (CLASS I, TYPE A URBAN PER WISCONSIN D.O.T. P.A.L.) SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER BUT LESS THAN 1:1.
16. EROSION MAT (CLASS I, TYPE B PER WISCONSIN D.O.T. P.A.L.) SHALL BE INSTALLED ON THE BOTTOM (INVERT) OF ROADSIDE DITCHES/SWALES AS SHOWN ON THIS PLAN, 1 ROLL WIDTH.
17. SOIL STABILIZERS SHALL BE APPLIED TO DISTURBED AREAS WITH SLOPES BETWEEN 10% AND 3:1 (DO NOT USE IN CHANNELS). SOIL STABILIZERS SHALL BE TYPE B, PER WISCONSIN D.O.T. P.A.L. (PRODUCT ACCEPTABILITY LIST), OR EQUAL. APPLY AT RATES AND METHODS SPECIFIED PER THIS SHEET. SOIL STABILIZERS SHALL BE RE-APPLIED WHENEVER VEHICLES OR OTHER EQUIPMENT TRACK ON THE AREA.
18. SILT FENCE OR EROSION MAT SHALL BE INSTALLED ALONG THE CONTOURS AT 100 FOOT INTERVALS DOWN THE SLOPE ON THE DISTURBED SLOPES STEEPER THAN 5% AND MORE THAN 100 FEET LONG THAT SHEET FLOW TO THE ROADWAY UNLESS SOIL STABILIZERS ARE USED.
19. SILT FENCE TO BE USED ACROSS AREAS OF THE LOT THAT SLOPE TOWARDS A PUBLIC STREET OR WATERWAY. SEE DETAILS.
20. SEDIMENT SHALL BE CLEANED FROM CURB AND GUTTER AFTER EACH RAINFALL AND PRIOR TO PROJECT ACCEPTANCE.
21. ACCUMULATED CONSTRUCTION SEDIMENT SHALL BE REMOVED FROM ALL PERMANENT BASINS TO THE ELEVATION SHOWN ON THE GRADING PLAN FOLLOWING THE STABILIZATION OF DRAINAGE AREAS.
22. ALL CONSTRUCTION ENTRANCES SHALL HAVE TEMPORARY ROAD CLOSED SIGNS THAT WILL BE IN PLACE WHEN THE ENTRANCE IS NOT IN USE AND AT THE END OF EACH DAY.
23. ANY PROPOSED CHANGES TO THE EROSION CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY OF MADISON AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES.
24. THE CITY, OWNER AND/OR ENGINEER MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AT ANY TIME DURING CONSTRUCTION.

SEEDING RATES:

TEMPORARY:

1. USE ANNUAL OATS AT 3.0 LB./1,000 S.F. FOR SPRING AND SUMMER PLANTINGS.
2. USE WINTER WHEAT OR RYE AT 3.0 LB./1,000 SF FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 15.

PERMANENT:

1. RIGHT OF WAY: USE WISCONSIN D.O.T. SEED MIX #40 AT 2 LB./1,000 S.F.
2. SITE: MADISON PARKS MIX BY LACROSSE SEED COMPANY OR EQUIVALENT, PER MANUFACTURER SPECIFIED APPLICATION RATE.

FERTILIZING RATES:

TEMPORARY AND PERMANENT:

USE WISCONSIN D.O.T. TYPE A OR B AT 7 LB./1,000 S.F.

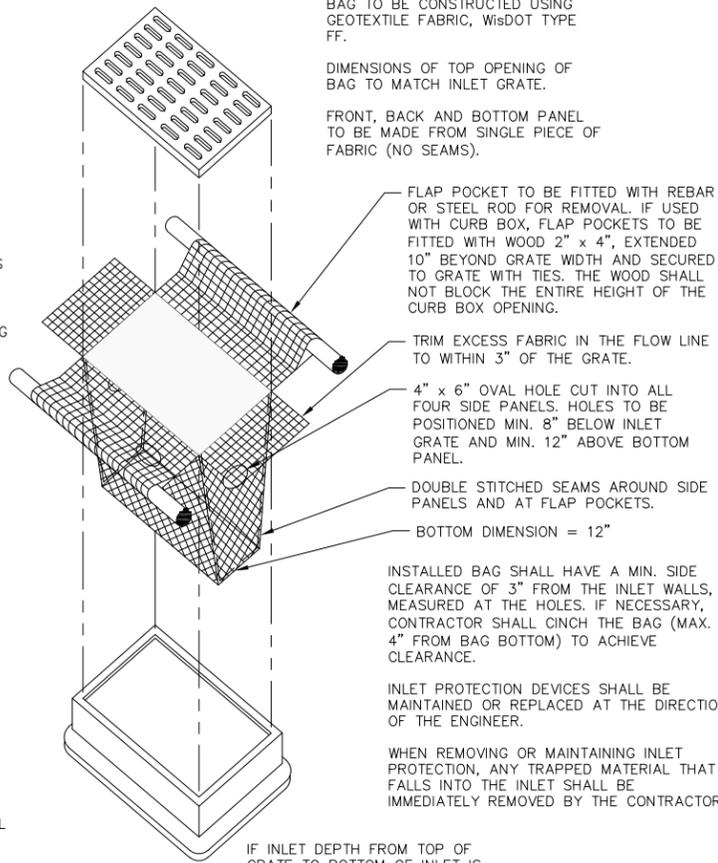
MULCHING RATES:

TEMPORARY AND PERMANENT:

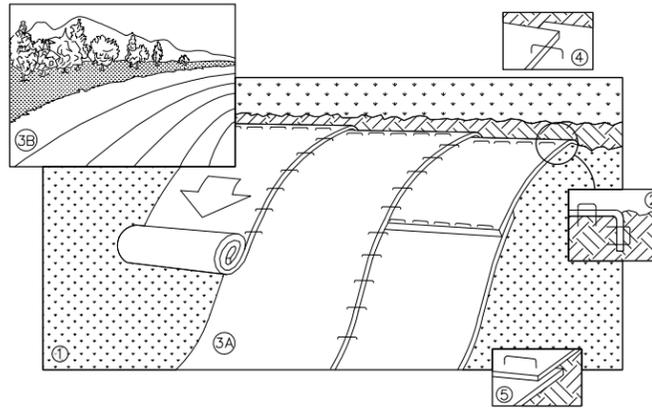
USE 1/2" TO 1-1/2" STRAW OR HAY MULCH, CRIMPED PER SECTION 607.3.2.3, OR OTHER RATE AND METHOD PER SECTION 627. WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION

CONSTRUCTION SEQUENCE:

1. INSTALL EROSION CONTROL MEASURES
2. CONDUCT DEMOLITION
3. STRIP TOPSOIL - SITE
4. ROUGH GRADE - SITE
5. CONSTRUCT UNDERGROUND UTILITIES
6. INSTALL INLET PROTECTION IN NEW INLETS
7. CONSTRUCT BUILDING
8. CONSTRUCT PAVEMENT
9. FINAL GRADE AND RESTORE DISTURBED AREAS
10. REMOVE EROSION CONTROL MEASURES AFTER DISTURBED AREAS ARE PAVED AND VEGETATIVE AREAS ARE 70% RESTORED



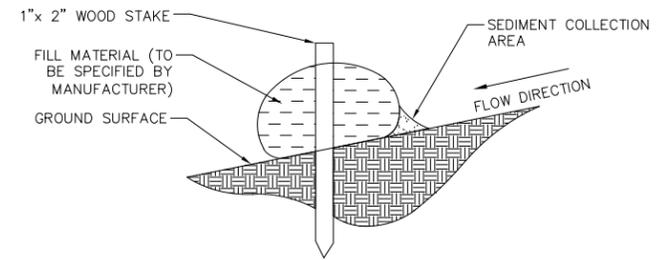
1 INLET PROTECTION TYPE D 1 NOT TO SCALE



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS <A.> DOWN, OR <B.> HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

1 EROSION MAT 1 NOT TO SCALE



1 CLASS II SLOPE INTERRUPTION 1 NOT TO SCALE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFIRM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.

VARIATIONS IN THE DIMENSIONS OR MATERIALS SHOWN HEREON SHALL BE PERTINENT IF THEY PROVIDE EQUIVALENT PROTECTION AND MATERIAL STRENGTH AND IF PRIOR APPROVAL OF THE ENGINEER IS OBTAINED.

LAP JOINTS SHALL NOT BE PLACED IN THE BOTTOM OF V-SHAPED DITCHES.

JUNCTION SLOTS ON ADJACENT STRIPS OF MATTING SHALL BE STAGGERED A MINIMUM OF 4 FEET (1.219 m) APART.

EDGES OF THE EROSION MAT SHALL BE IMPRESSED IN THE SOIL.

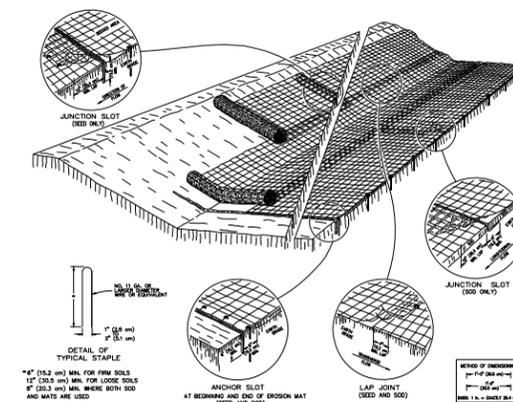
EROSION MAT WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE SPECIFICATIONS.

EROSION MAT OVER SOD

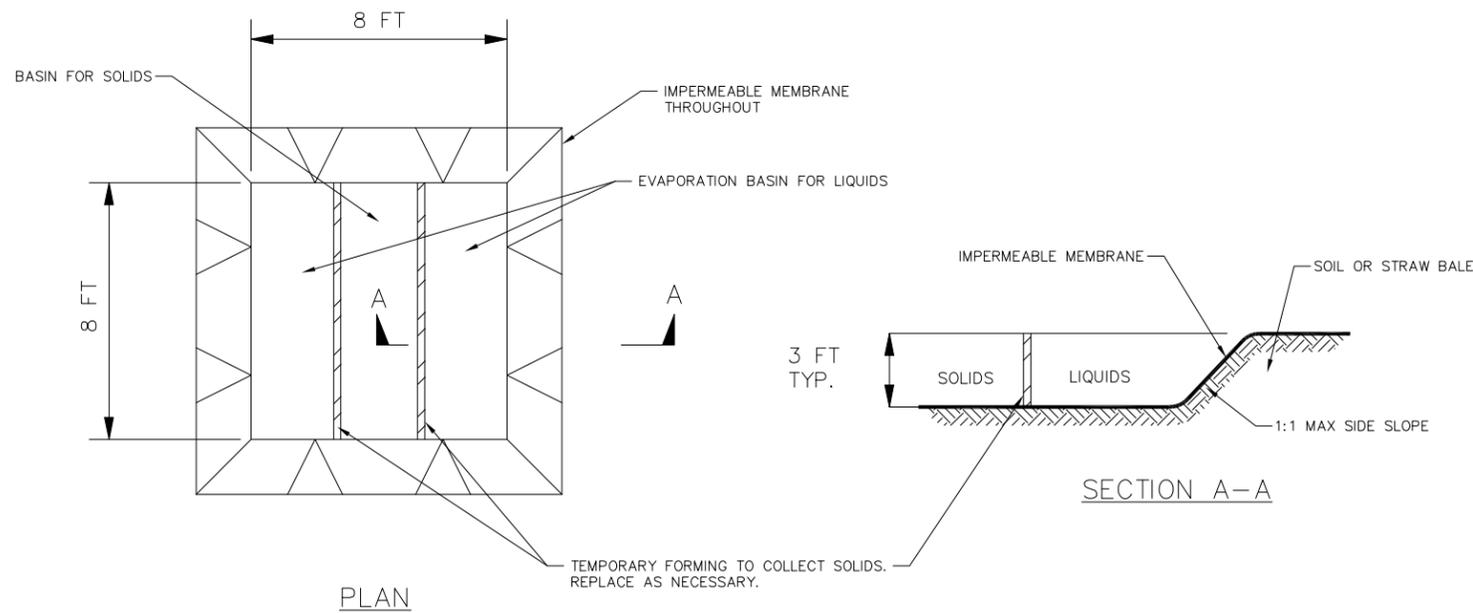
- a. ONLY JUTE FABRIC WILL BE PERMITTED OVER SOD.
- b. WOOD STAKES FOR SOD MAY BE OMITTED BY THE ENGINEER IF THE EXISTING SLOPE AND SOIL CONDITIONS SO WARRANT.
- c. THE WIDTH OF THE EROSION MAT SHALL ALWAYS EQUAL THE SOD WIDTH.
- d. SOD STRIPS MAY BE PLACED EITHER LONGITUDINALLY OR TRANSVERSELY TO THE FLOW LINE OF THE DITCH.

EROSION MAT OVER SEEDING

JUNCTION OR ANCHOR SLOTS SHALL BE AT MINIMUM INTERVALS OF 100 FEET (30.48 m) ON GRADES UP TO AND INCLUDING 3 PERCENT, AND 50 FEET (15.24 m) ON GRADES EXCEEDING 3 PERCENT



1 CHANNEL EROSION MAT 1 NOT TO SCALE



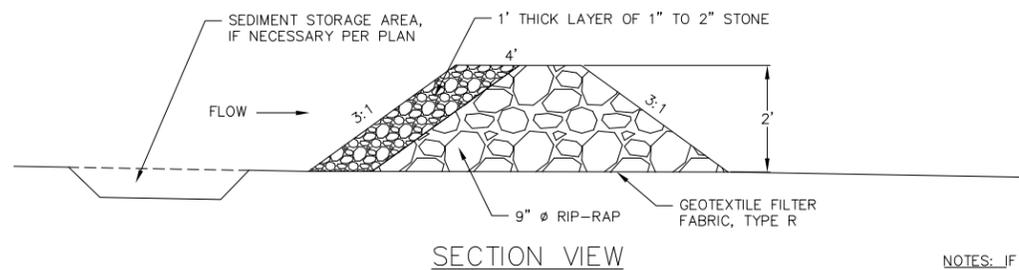
PLAN

SECTION A-A

CONSTRUCTION SPECIFICATIONS

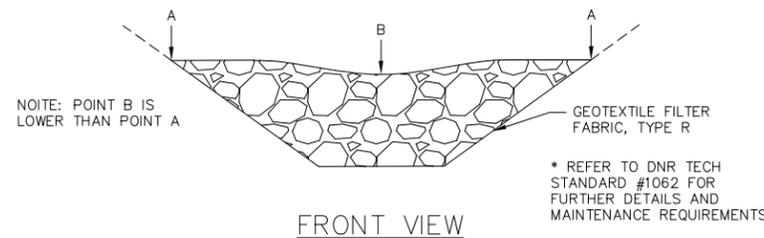
1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
3. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

1 TEMPORARY CONCRETE WASHOUT
NOT TO SCALE



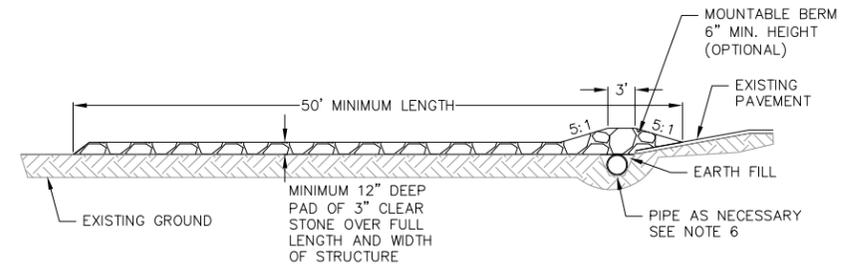
SECTION VIEW

NOTES: IF SITE CONDITIONS WARRANT, CONTRACTOR MAY SUBSTITUTE STONE WEEPER FOR MANUFACTURED DITCH CHECK IN ACCORDANCE WITH DNR TECH STANDARD #1062

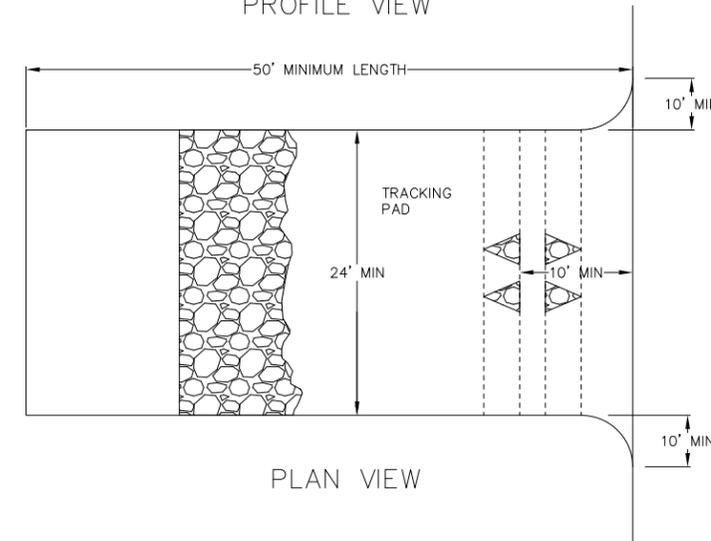


FRONT VIEW

1 WEEPER
NOT TO SCALE



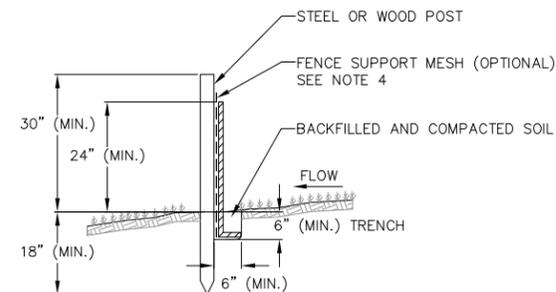
PROFILE VIEW



PLAN VIEW

1. FOLLOW WISCONSIN DNR TECHNICAL STANDARD 1057 FOR FURTHER DETAILS AND INSTALLATION.
2. LENGTH - MINIMUM OF 50'
3. WIDTH - 24' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
4. ON SITES WITH A HIGH GROUND WATER TABLE OR WHERE SATURATED CONDITIONS EXIST, GEOTEXTILE FABRIC SHALL BE PLACED OVER EXISTING GROUND PRIOR TO PLACING STONE. FABRIC SHALL BE WISDOT TYPE-HR GEOTEXTILE FABRIC.
5. STONE - CRUSHED 3" CLEAR STONE SHALL BE PLACED AT LEAST 12" DEEP OVER THE ENTIRE LENGTH AND WIDTH OF ENTRANCE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MINIMUM OF 6" STONE OVER THE PIPE. PIPE SHALL BE SIZED ACCORDING TO THE DRAINAGE REQUIREMENTS. WHEN THE ENTRANCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE SHALL NOT BE NECESSARY. THE MINIMUM PIPE DIAMETER SHALL BE 6". CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF SAID PIPE.
7. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC ENTERS AND/OR LEAVES THE CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE TRACKING PAD.

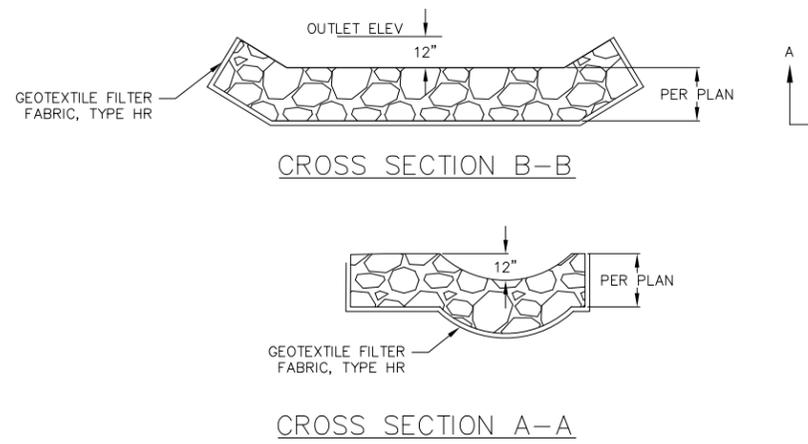
1 TRACKING PAD
NOT TO SCALE



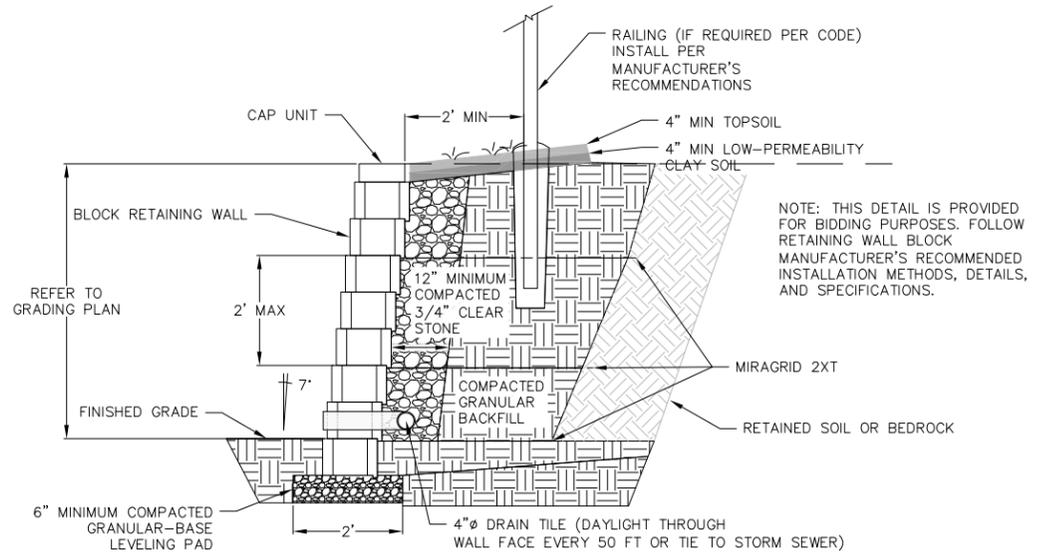
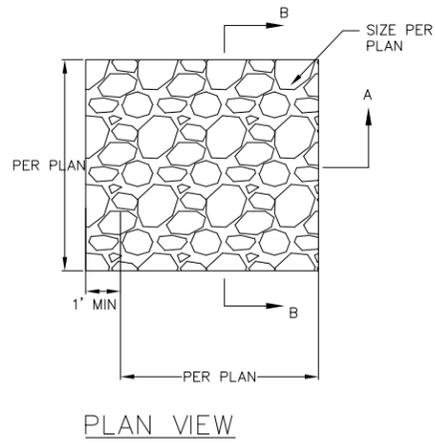
NOTES:

1. INSTALL SILT FENCE TO FOLLOW THE GROUND CONTOURS AS CLOSELY AS POSSIBLE.
2. CURVE THE SILT FENCE UP THE SLOPE TO PREVENT WATER FROM RUNNING AROUND THE ENDS.
3. POST SPACING WITH FENCE SUPPORT MESH = 10 FT. (MAX.)
POST SPACING WITHOUT FENCE SUPPORT MESH = 6 FT. (MAX.)
4. SILT FENCE SUPPORT MESH CONSISTS OF 14-GAUGE STEEL WIRE WITH A MESH SPACING OF 6 IN. X 6 IN. OR PREFABRICATED POLYMERIC MESH OF EQUIVALENT STRENGTH

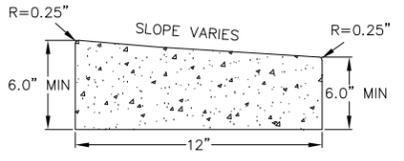
1 SILT FENCE
NOT TO SCALE



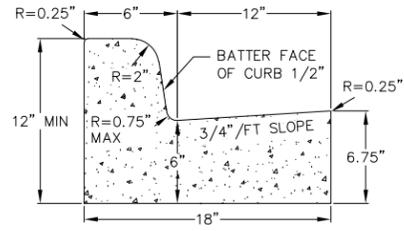
1
1 RIP-RAP OUTLET
NOT TO SCALE



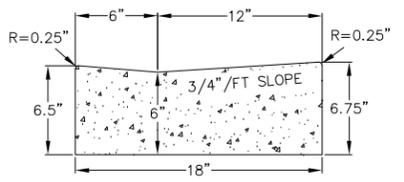
1
1 LANDSCAPE BLOCK RETAINING WALL SYSTEM
NOT TO SCALE



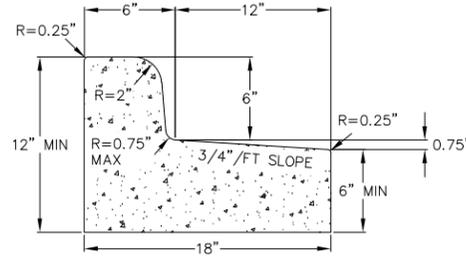
RIBBON CURB
CROSS SECTION



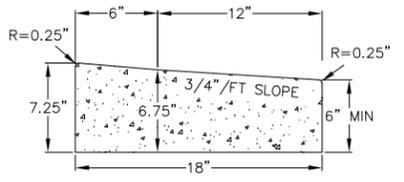
CURB AND GUTTER
CROSS SECTION



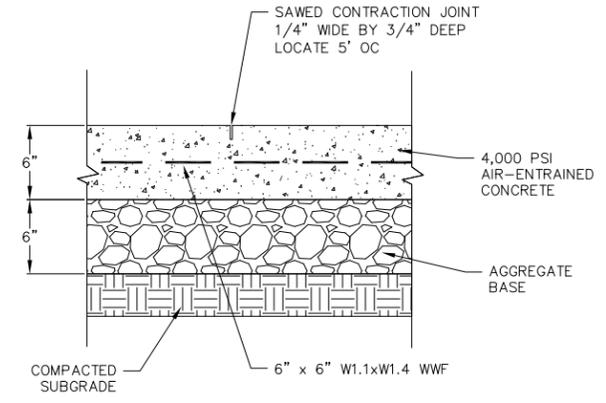
HANDICAP RAMP
GUTTER CROSS SECTION



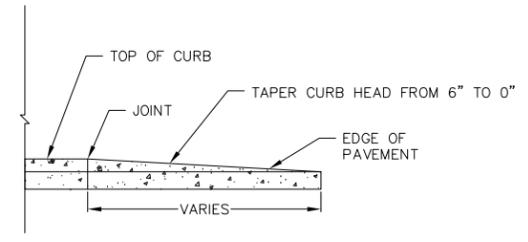
CURB AND GUTTER
REJECT SECTION



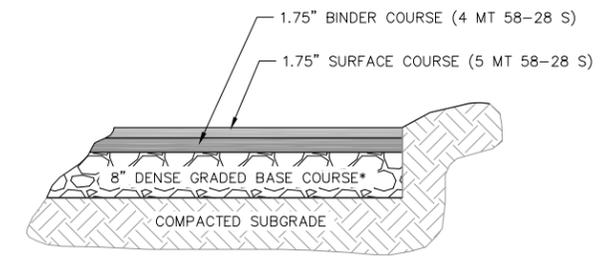
HANDICAP RAMP
GUTTER REJECT SECTION



1
1 CONCRETE PAD
NOT TO SCALE

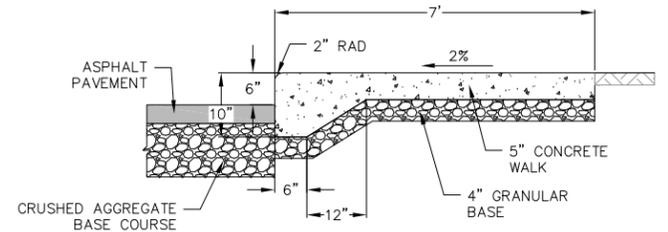


1
1 CURB & GUTTER TERMINATION
NOT TO SCALE



*THE UPPER 4" SHOULD CONSIST OF 1 1/4" DENSE GRADED BASE; THE BOTTOM PART OF THE LAYER CAN CONSIST OF 3" DENSE GRADED BASE

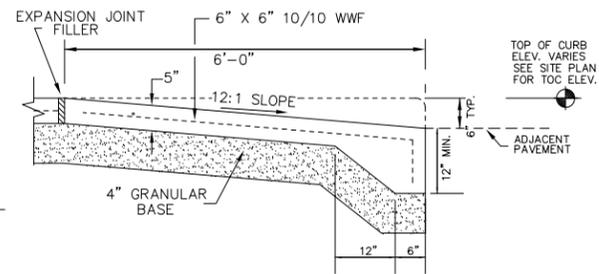
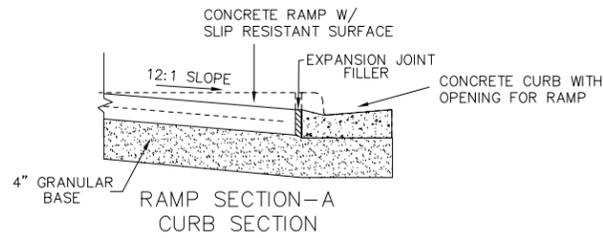
BITUMINOUS PAVEMENT



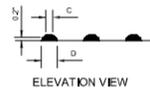
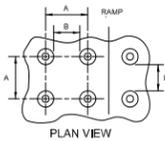
1
1 CURBED SIDEWALK SITE DETAIL
NOT TO SCALE

1
1 18" CONCRETE CURB AND GUTTER
NOT TO SCALE

1
1 SITE PAVEMENT
NOT TO SCALE



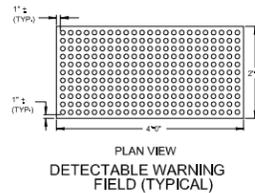
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"



TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION

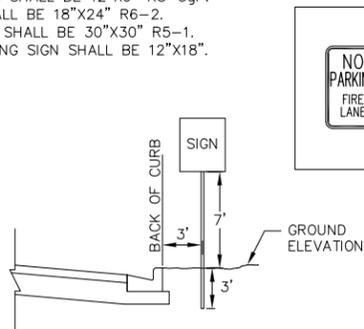
NOTE: 1) MATERIALS AND METHOD OF CONSTRUCTION FOR TRUNCATED DOMES SHALL BE SPECIFIED IN SPECIAL PROVISIONS OR AS REQUIRED BY THE VILLAGE ENGINEER.
2) COLOR SHALL BE A DISSIMILAR COLOR FROM THE ADJACENT PAVED SURFACE AND APPROVED BY THE OWNER AND ENGINEER



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

SIGNAGE NOTES:

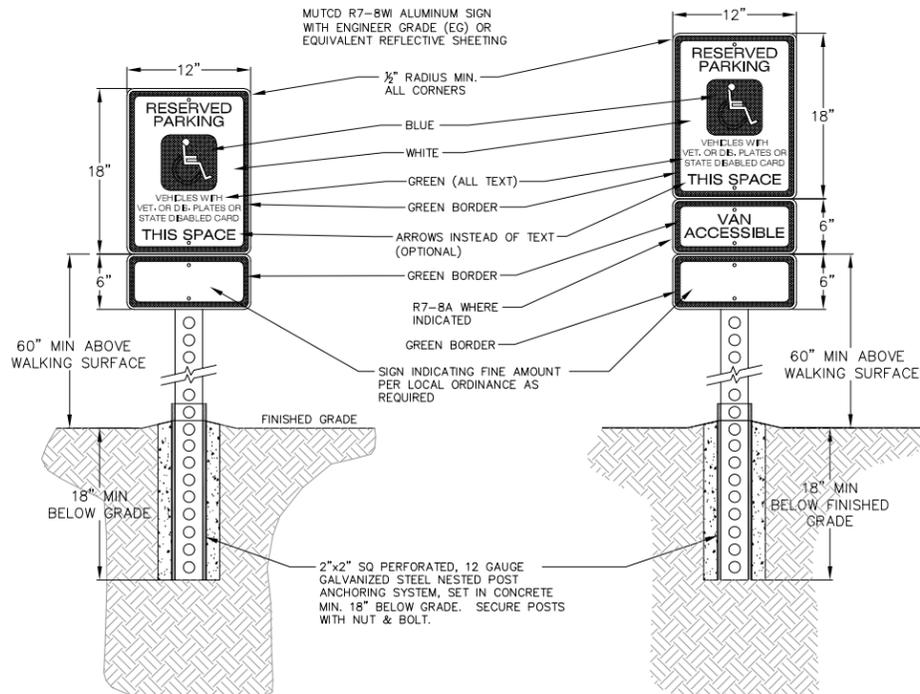
- ALL SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- SIGNS SHALL BE A DISTANCE OF 7' FROM GROUND LEVEL TO THE BOTTOM OF THE SIGN MOUNTED ON THE POST AND LOCATED 3' BEHIND THE BACK OF CURB.
- SIGN POSTS SHALL BE 2-3/8" O.D., GALVANIZED 10 FT LONG, 13 GAUGE, AND 0.095 WALL THICKNESS. MOUNT SIGN AT TOP OF THE POST, AND INSTALL POSTS 3' DEEP AND MIX 1/2 BAG OF 80 LB SAKRETE CONCRETE, POURING IT AROUND THE POST BELOW THE GROUND BEFORE COVERING WITH 8" OF TOPSOIL.
- LOADING ZONE SIGNS SHALL BE 12"x9" R8-3gP.
- ONE-WAY SIGNS SHALL BE 18"x24" R6-2.
- DO NOT ENTER SIGN SHALL BE 30"x30" R5-1.
- FIRE LANE NO PARKING SIGN SHALL BE 12"x18".



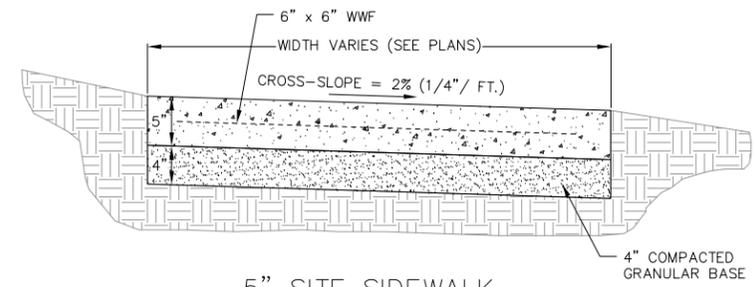
1 STANDARD SIGN
1 NOT TO SCALE

1 CURB RAMP DETAIL
1 NOT TO SCALE

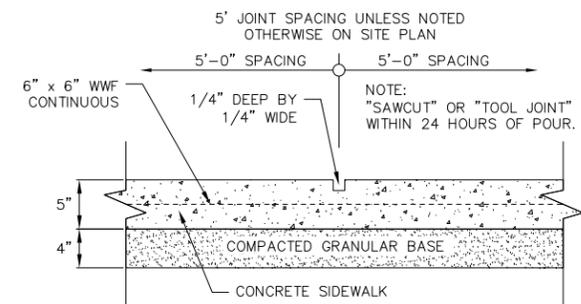
NOTE:
1. SIGN TO BE CENTERED ON PARKING SPACE
2. WHERE DETAIL DIFFERS FROM ARCHITECTURAL SITE PLAN DETAILS, THOSE DETAILS SHALL TAKE PRECEDENCE.



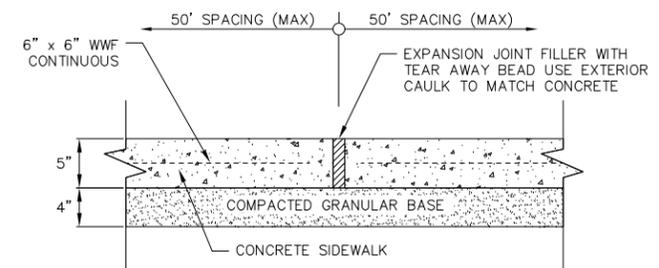
1 ADA SIGN
1 NOT TO SCALE



5" SITE SIDEWALK

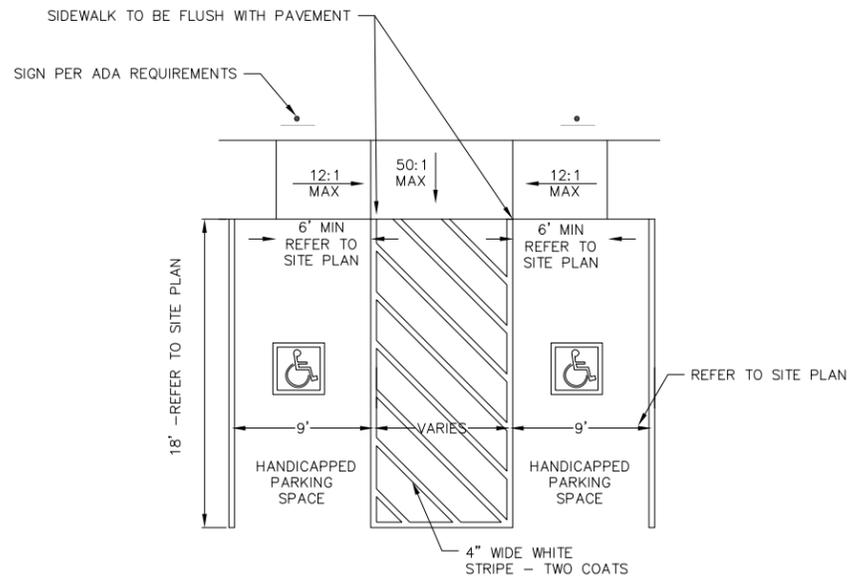


SIDEWALK CONTROL JOINT

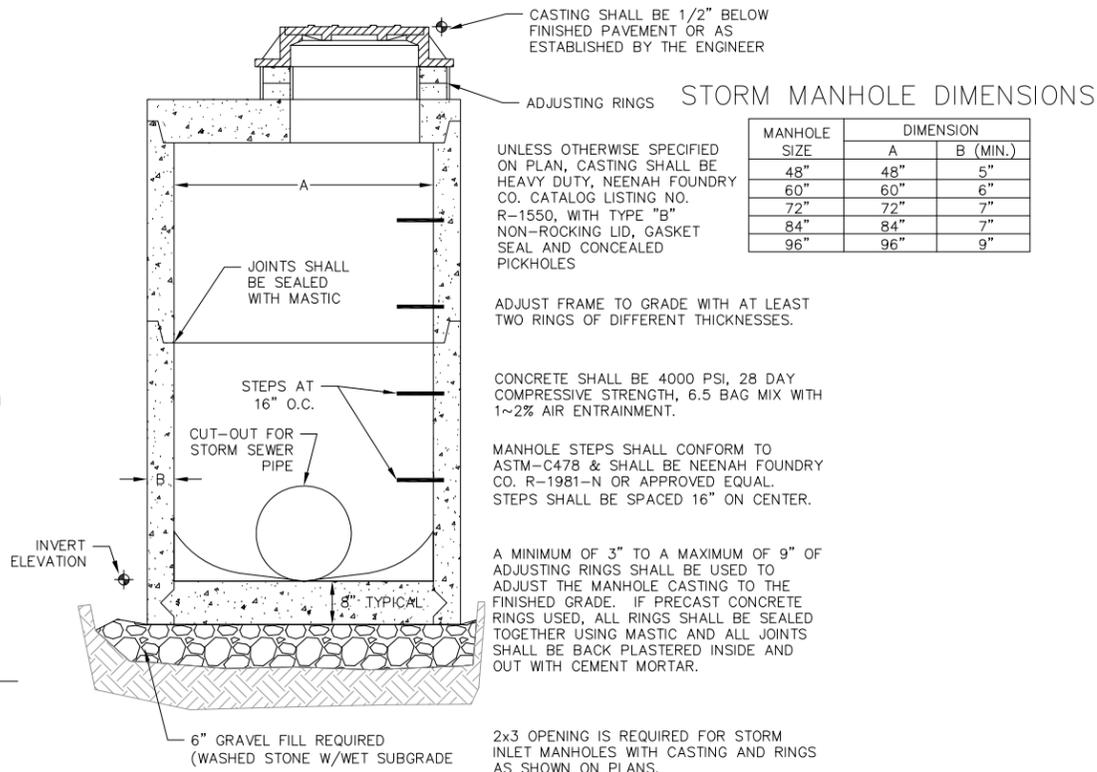


SIDEWALK EXPANSION JOINT

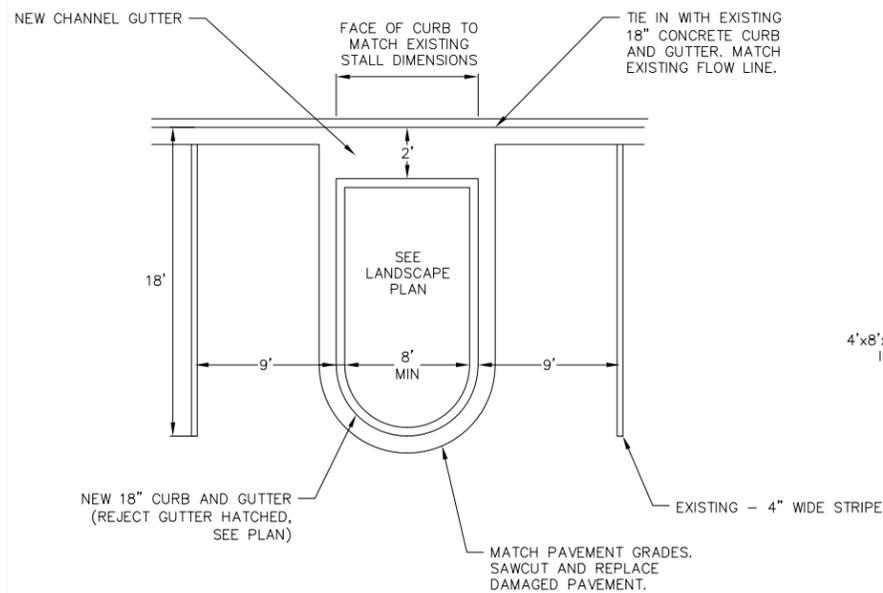
1 5" SIDEWALK
1 NOT TO SCALE



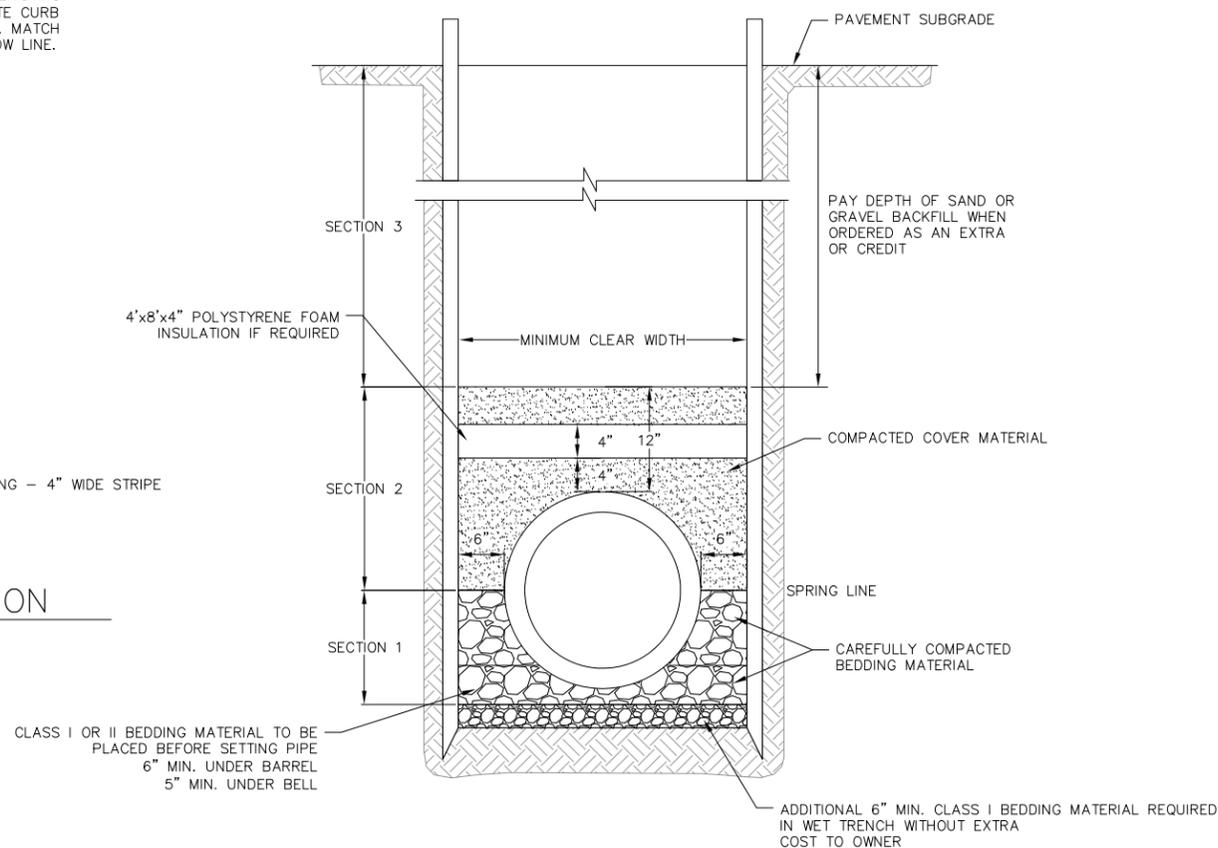
1 ADA STRIPING
1 NOT TO SCALE



1 STORM SEWER MANHOLE
1 NOT TO SCALE



1 LANDSCAPED ISLAND CONVERSION
1 NOT TO SCALE



1 STANDARD RIGID STORM SEWER TRENCH SECTION - CLASS B
1 NOT TO SCALE

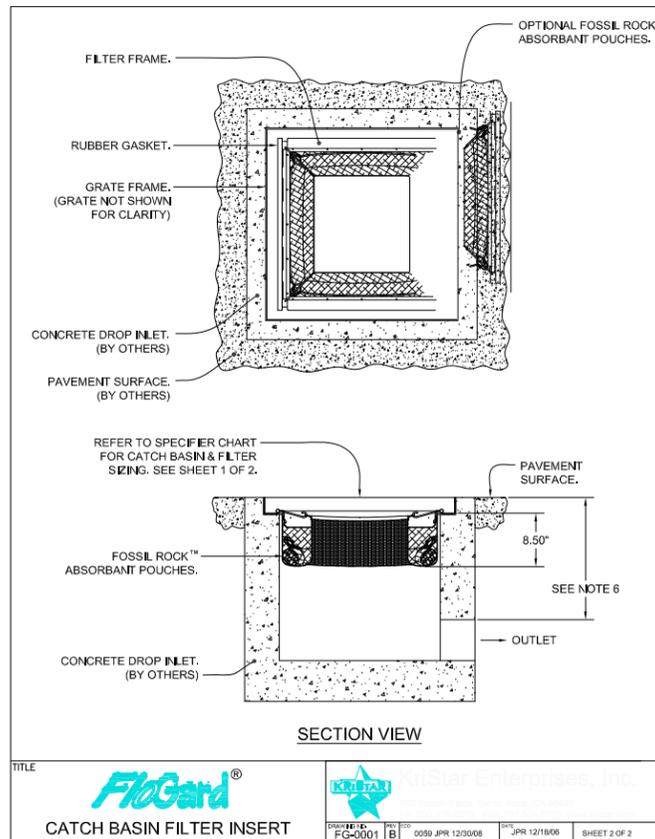
SPECIFIER CHART			
MODEL	INLET ID	GRATE OD	COMMENTS
FF-16D	16" X 16"	18" X 18"	GRATED INLET
FF-18D	18" X 18"	20" X 20"	GRATED INLET
FF-1836SD	18" X 36"	18" X 40"	GRATED INLET
FF-1836DGO	18" X 36"	18" X 40"	COMBINATION INLET
FF-24D	24" X 24"	26" X 26"	GRATED INLET
FF-2436D	24" X 36"	24" X 40"	GRATED INLET
FF-RF24D	24" DIA.	26" DIA.	CIRCULAR INLET
FF-24DGO	24" X 24"	18" X 26"	COMBINATION INLET
FF-2436DGO	24" X 36"	24" X 40"	COMBINATION INLET
FF-36D (2 PIECE)	36" X 36"	36" X 40"	GRATED INLET
FF-3648D (2 PIECE)	36" X 48"	40" X 48"	GRATED INLET

NOTES:

- FibGard® filter body is prefabricated from polypropylene woven monofilament geotextile.
- All metal components shall be constructed from stainless steel Type 304.
- Refer to Specifier Chart for catch basin and filter sizing.
- Filter inserts are supplied with optional "foam" filter pouches utilizing fossil rock™ filter medium for the collection and retention of petroleum hydrocarbons (oil & greases).
- FibGard® filter inserts and fossil rock™ filter medium pouches must be maintained in accordance with manufacturer recommendations.
- Catch basin depth must not allow filter body to obstruct outlet pipe. See sheet 2 of 2.

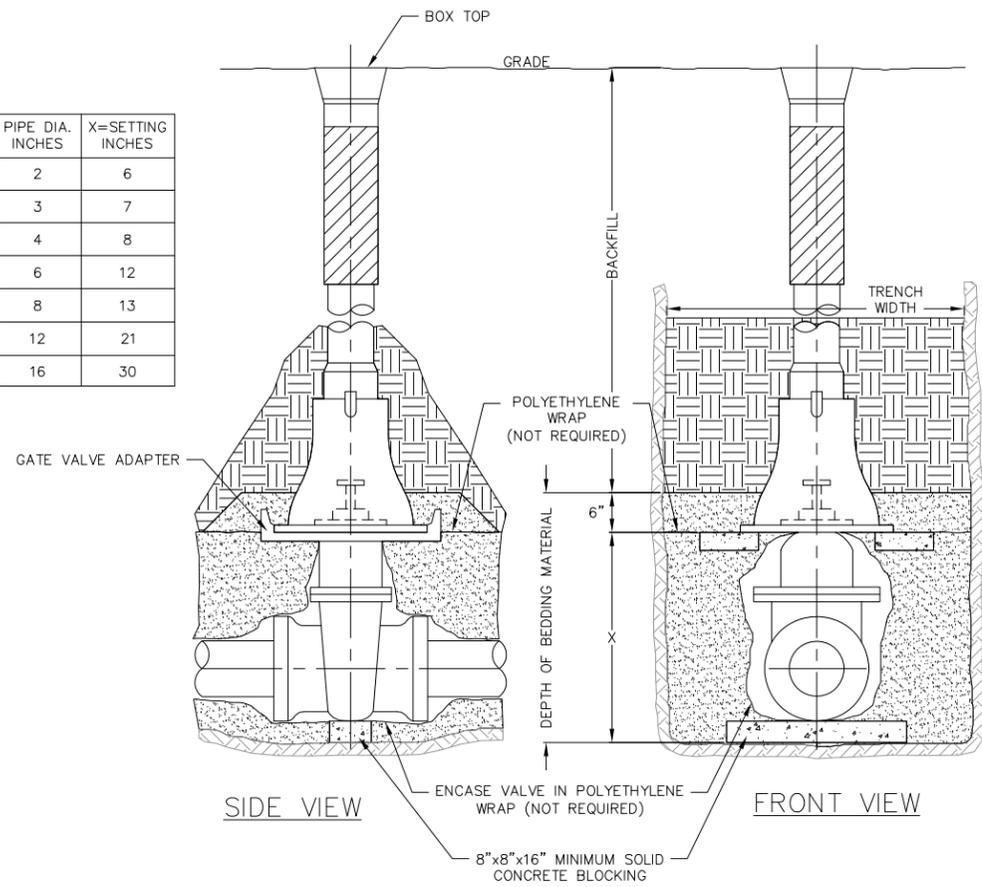
CATCH BASIN FILTER INSERT

FF-0001 B 0059 JPR 12/30/08 JPR 12/18/06 SHEET 1 OF 2

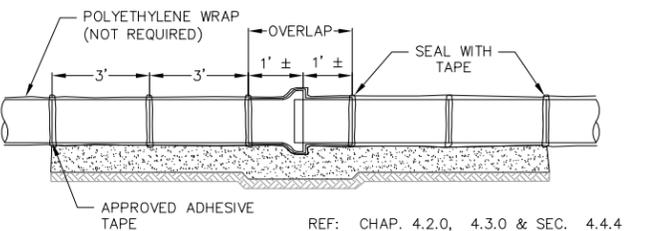
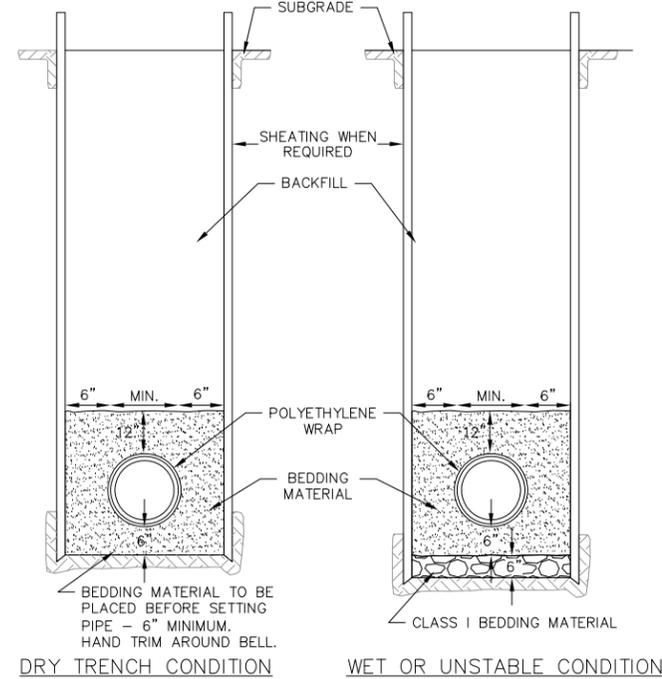


1 STORM INLET FILTER
1 NOT TO SCALE

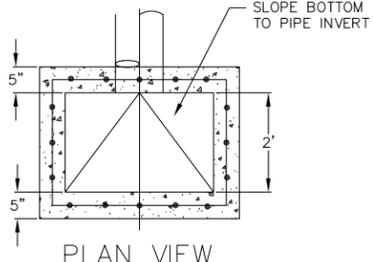
PIPE DIA. INCHES	X=SETTING INCHES
2	6
3	7
4	8
6	12
8	13
12	21
16	30



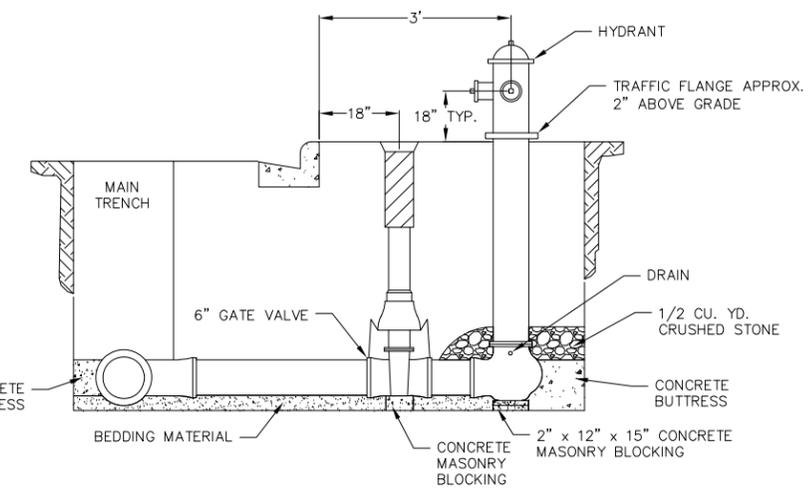
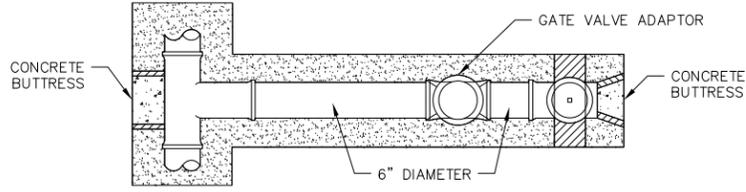
1 STANDARD GATE VALVE BOX SETTING
1 NOT TO SCALE



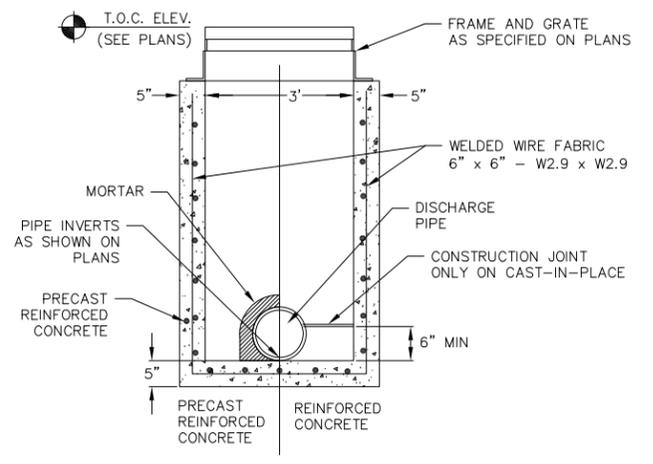
1 STANDARD WATER MAIN TRENCH SECTION
1 NOT TO SCALE



PLAN VIEW

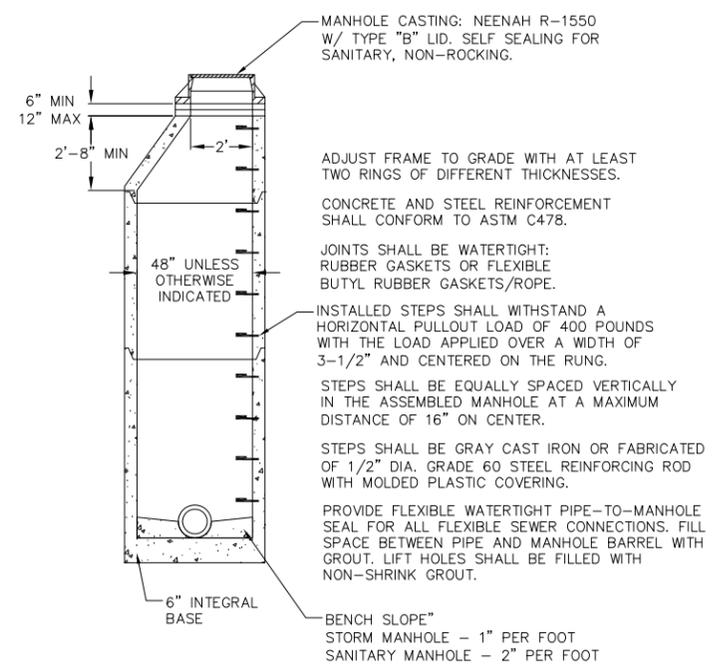


1 STANDARD HYDRANT SETTING
1 NOT TO SCALE

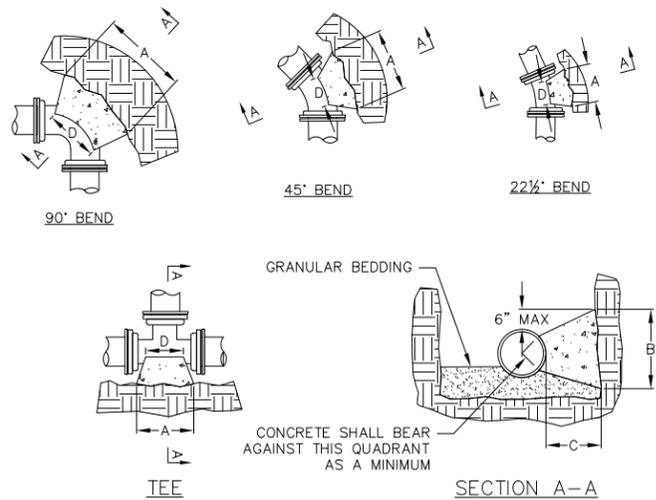


CROSS SECTION

1 CURB INLET - TYPE 3, 2' x 3' BASIN
1 NOT TO SCALE



1 PRECAST CONCRETE MANHOLE
1 NOT TO SCALE



DIMENSION "D" SHALL BE AS LARGE AS POSSIBLE, BUT THE CONCRETE SHALL NOT INTERFERE WITH THE MECHANICAL JOINTS.

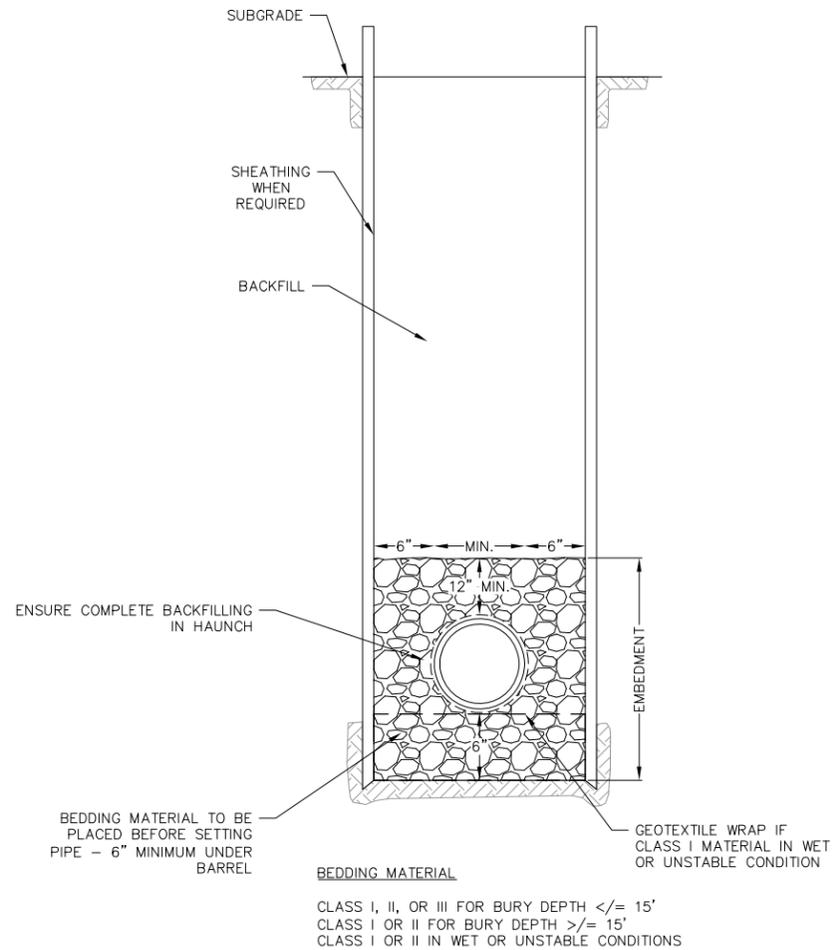
DIMENSION "C" SHALL BE AT LEAST 6 INCHES, AND LARGE ENOUGH TO MAKE THE "Q" ANGLE EQUAL TO OR GREATER THAN 45 DEGREES WITH THE DIMENSION "A" AS SHOWN ON THE TABLE, OR GREATER, AND WITH DIMENSION "D" AS LARGE AS POSSIBLE.

CONCRETE SHALL BE CLASS "C", SEE SECTION 03301

PIPE SIZE*	BUTTRISS DIMENSIONS							
	TEES		22.5° BEND		45° BEND		90° BEND	
	A	B	A	B	A	B	A	B
4	0'-10"	1'-6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
6	1'-6"	1'-8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
8	1'-9"	2'-4"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
10	1'-9"	2'-4"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
12	2'-3"	1'-7"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
16	3'-8"	2'-10"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
20	5'-0"	3'-10"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"
24	5'-4"	4'-8"						

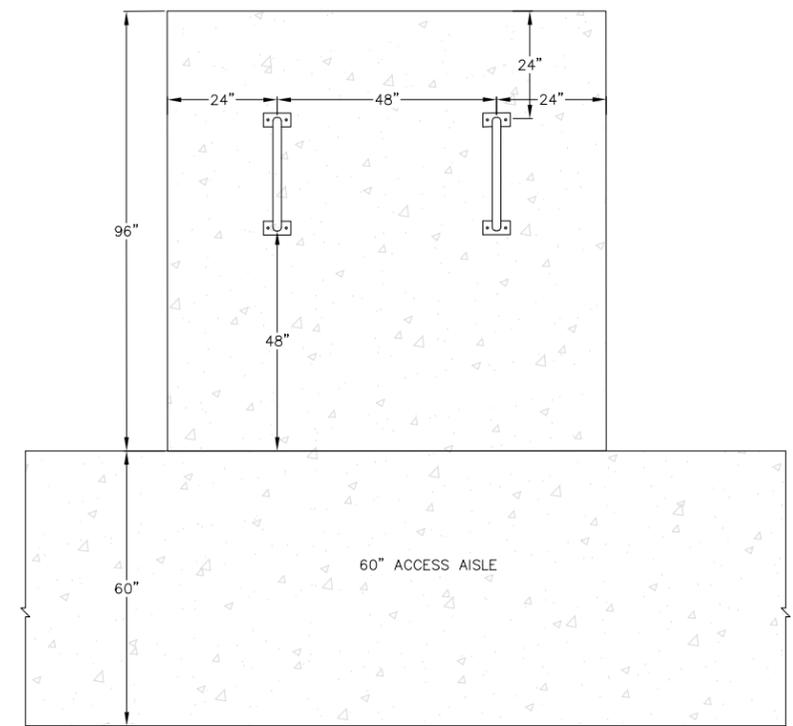
DIMENSIONS IN THE TABLE ARE BASED ON A WATER PRESSURE OF 150 PSI AND SOIL RESISTANCE OF 2000 LBS/SQ FT

* = FOR TEE THIS WILL BE THE BRANCH PIPE



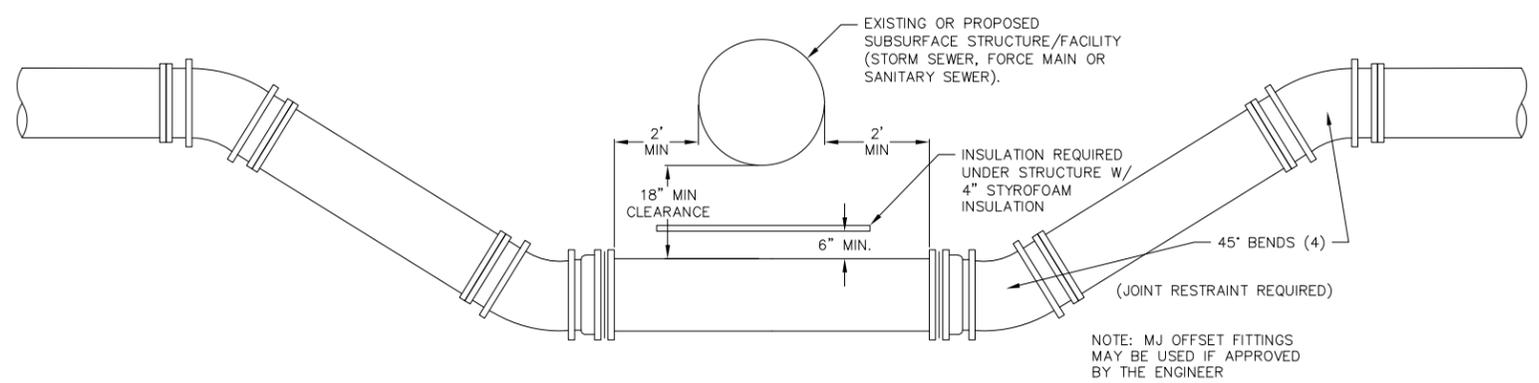
CLASS I, II, OR III FOR BURY DEPTH \leq 15'
 CLASS I OR II FOR BURY DEPTH \geq 15'
 CLASS I OR II IN WET OR UNSTABLE CONDITIONS

1 BIKE RACK LAYOUT (TYPICAL)
 1 NOT TO SCALE

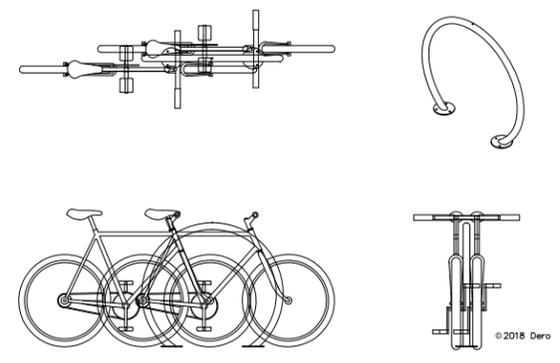


1 BUTTRISS FOR BENDS
 1 NOT TO SCALE

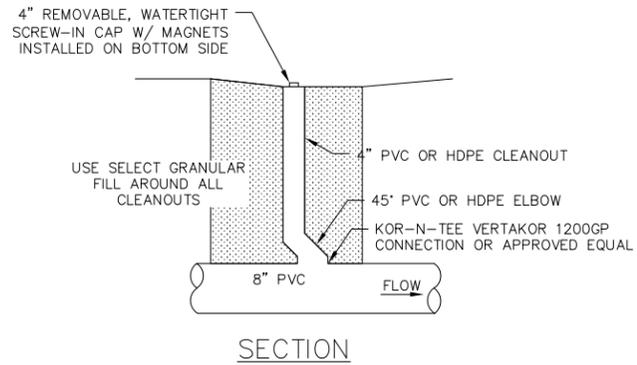
1 STANDARD SANITARY TRENCH SECTION
 1 NOT TO SCALE



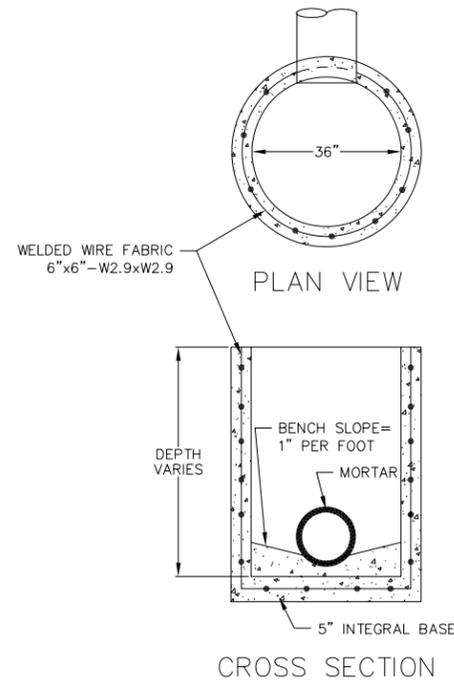
1 LOWERING WATERMAIN UNDER STORM STRUCTURE
 1 NOT TO SCALE



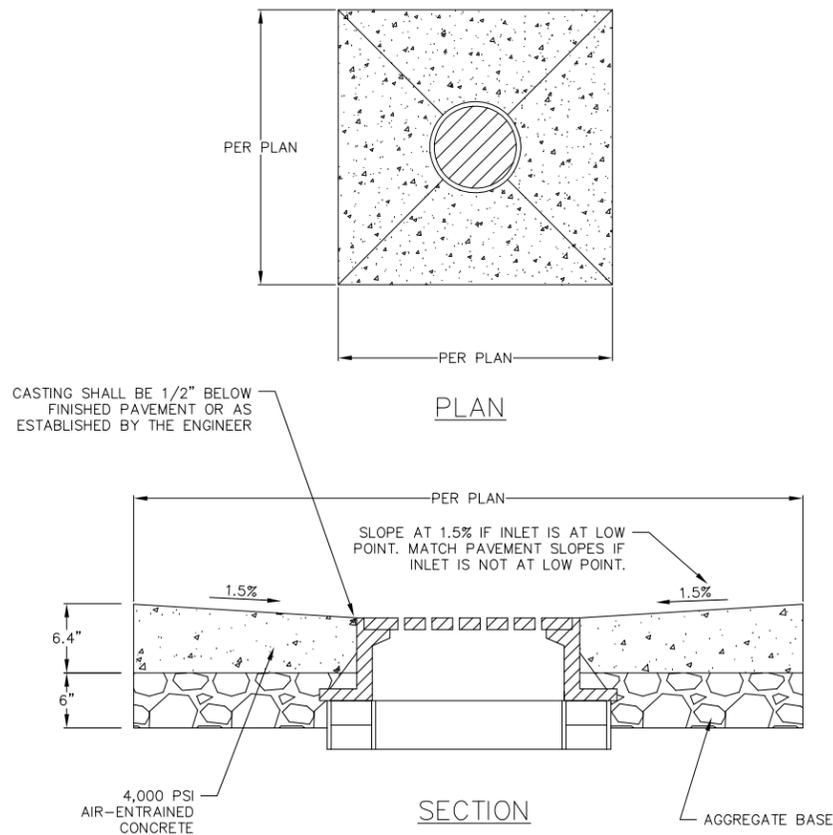
1 ROUND BIKE RACK BY DERO DETAIL
 1 NOT TO SCALE



1 STORM SEWER CLEANOUT
1 NOT TO SCALE

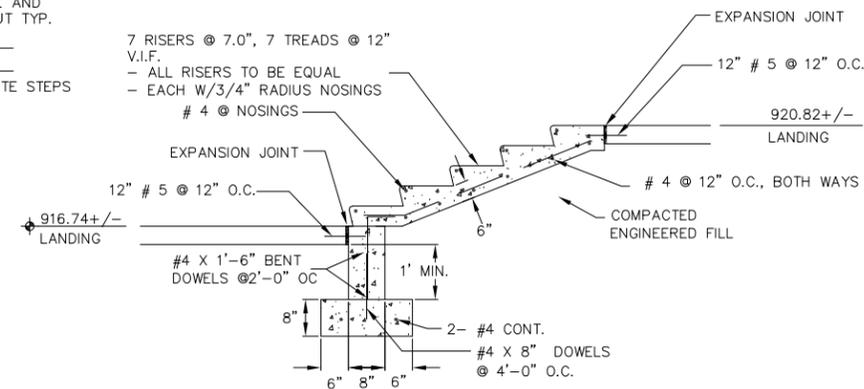
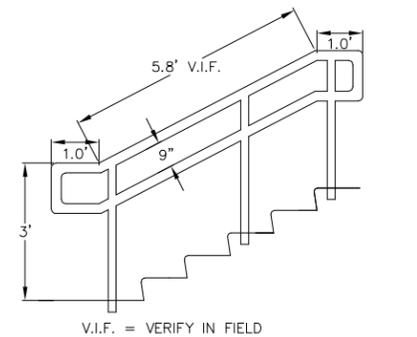
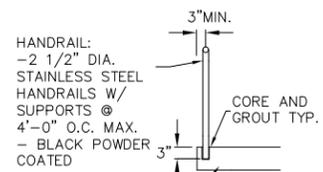


1 FIELD INLET (36" DIA. BASIN)
1 NOT TO SCALE



1 CONCRETE COLLAR FOR FIELD INLET
1 NOT TO SCALE

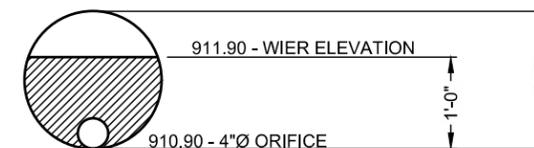
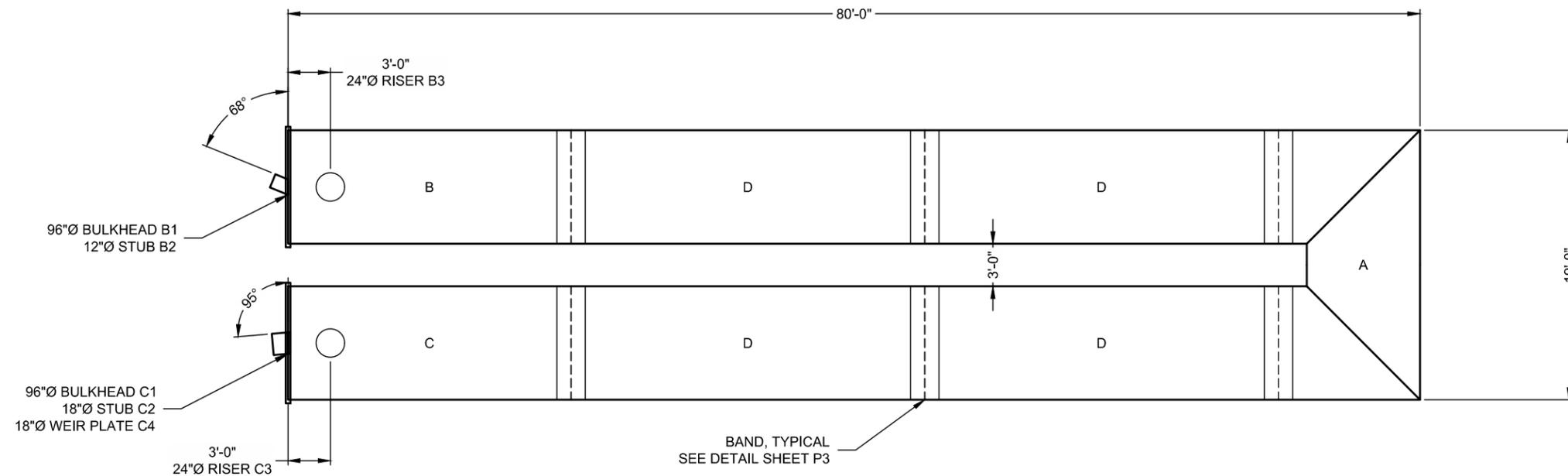
- NOTES:
1. ALL REBAR TO BE EPOXY COATED
 2. EXPANSION JOINTS TO BE 1/2" WITH COMPRESSIBLE FILLER, BACKER ROD AND CAULK.
 3. STEEL REINFORCEMENT MINIMUM 3" CLEAR FROM EARTH SURFACE AND 2" CLEAR FROM EXPOSED SURFACE.
 4. STAIR TREADS AND RISERS SHALL BE CONSISTENT DEPTHS AND HEIGHTS RESPECTIVELY BASED UPON FIELD CONDITIONS.
 5. SLOPE STAIR TREADS AT 2% (TYP.)
 6. APPLY LIGHT BROOM FINISH PERPENDICULAR TO TRAFFIC TO ALL CONCRETE FLATWORK.



1 CONCRETE STAIRS AND HANDRAIL
1 NOT TO SCALE

STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB B2	910.90	906.90
18"Ø STUB C2	910.90	906.90

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
24"Ø RISER B3	916.80	906.90
24"Ø RISER C3	916.62	906.90



WIER PLATE C4

1"=2'

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (4) PAGES INCLUDING THE FOLLOWING:

- PIPE STORAGE = 8,194 CF
- MAINLINE PIPE GAGE = 14
- WALL TYPE = SOLID
- DIAMETER = 96"
- FINISH = ALT2
- CORRUGATION = 5x1

CUSTOMER _____

DATE _____

ASSEMBLY

SCALE: 1" = 10'
 PIPE STORAGE: 8,194 CF
 LOADING: H2O
 PIPE INV. = 906.90'±

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
- ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD (EOR) PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2½" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE AS REQUIRED, BY CONTRACTOR.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ACCESS CASTINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT SUPPLIED BY CONTECH.

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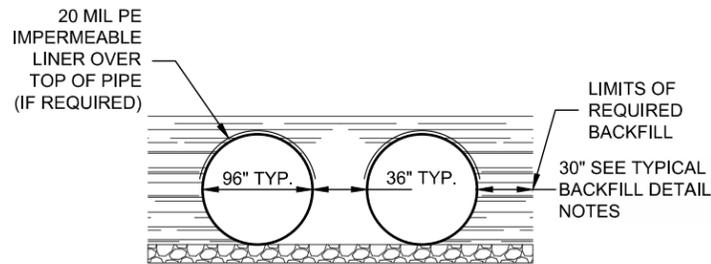
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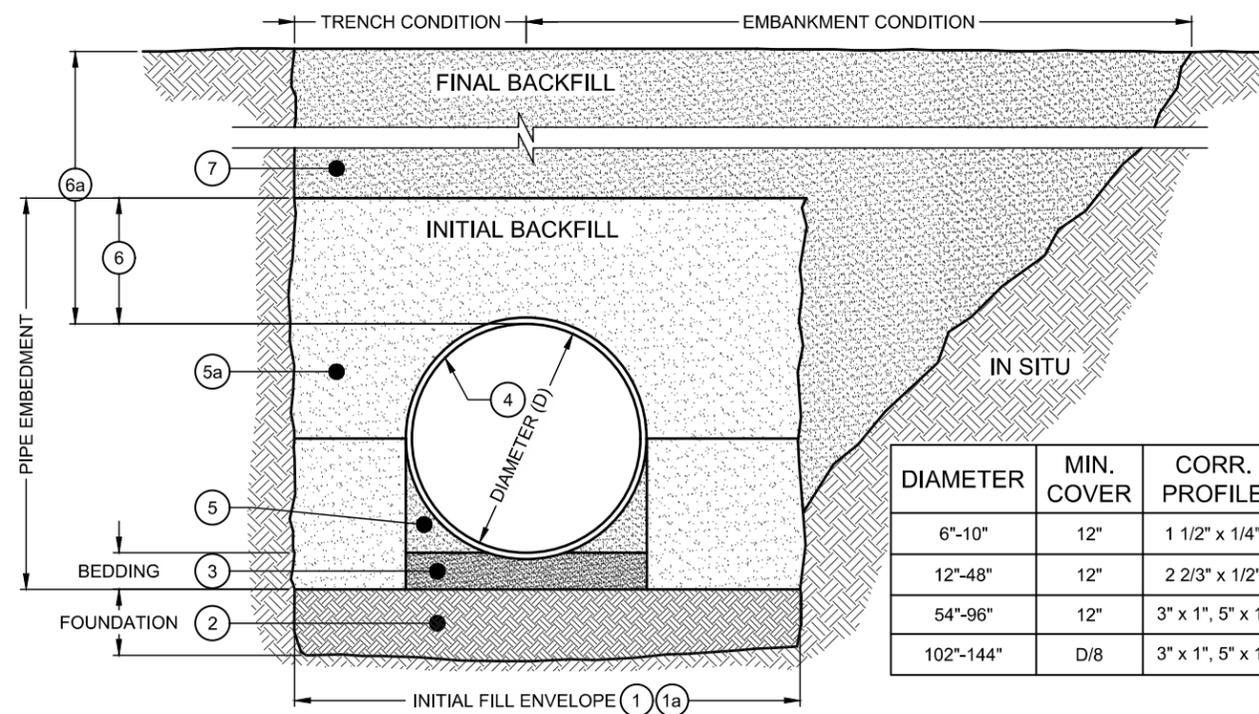
96"Ø UNDERGROUND DETENTION SYSTEM - 636755-010
 EAST SPRINGS DRIVE REDEVELOPMENT
 MADISON, WI
 SITE DESIGNATION: P1 - WEST DETENTION

PROJECT No.: 636755	SEQ. No.: 010	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET NO.: P1	OF	4



TYPICAL SECTION VIEW
NOT TO SCALE

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.



BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

- 1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE MINIMUM TRENCH WIDTH (12.6.6.1):
 PIPE ≤ 12": D + 16"
 PIPE > 12": 1.5D + 12"
- 1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
 PIPE < 24": 3.0D
 PIPE 24" - 144": D + 4'0"
 PIPE > 144": D + 10'0"
- 2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
- 3 ENGINEER TO DETERMINE IF BEDDING IS REQUIRED. BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).
- 4 CORRUGATED STEEL PIPE (CSP / HEL-COR).
- 5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
- 5a INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
- 6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
- 6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
- 7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

- NOTES:**
- ENGINEER TO DETERMINE IF GEOTEXTILE SHOULD BE USED TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).
 - FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER.
 - CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

TYPICAL BACKFILL DETAIL
NOT TO SCALE

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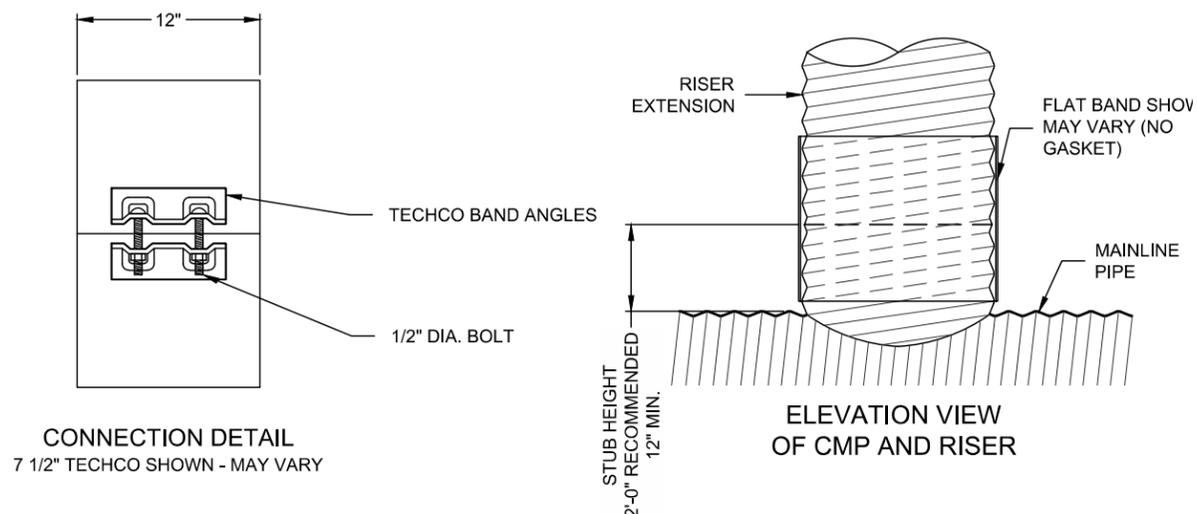
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96"Ø UNDERGROUND DETENTION SYSTEM - 636755-010
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P1 - WEST DETENTION

PROJECT No.: 636755	SEQ. No.: 010	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET NO.: P2	OF	4

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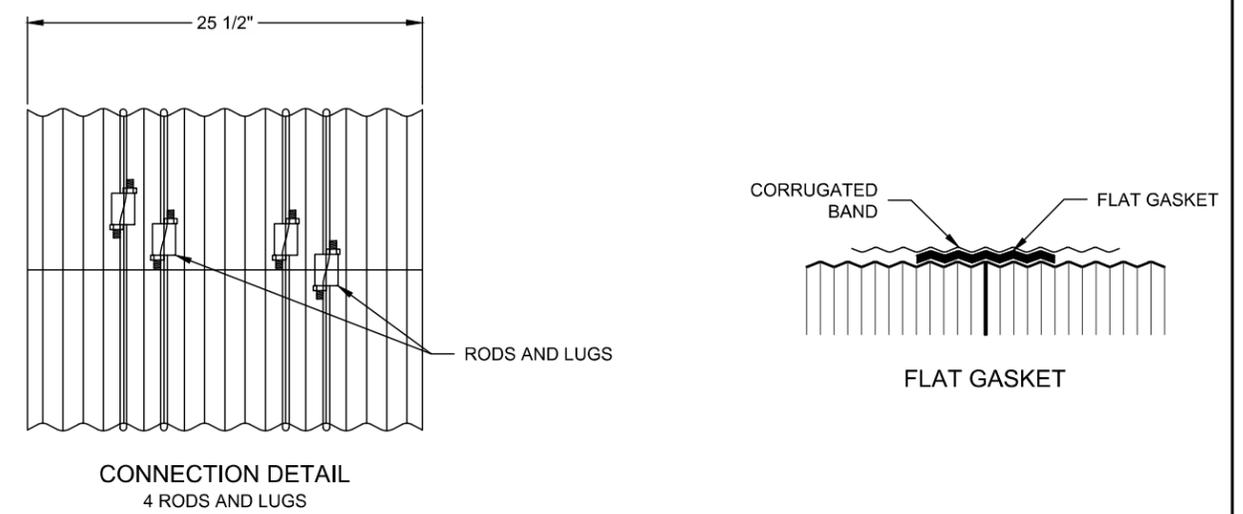


PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



2 2/3"x1/2" RIVETED PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" THRU 96" 2-PIECES
 - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
8. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

10-C BAND DETAIL
NOT TO SCALE

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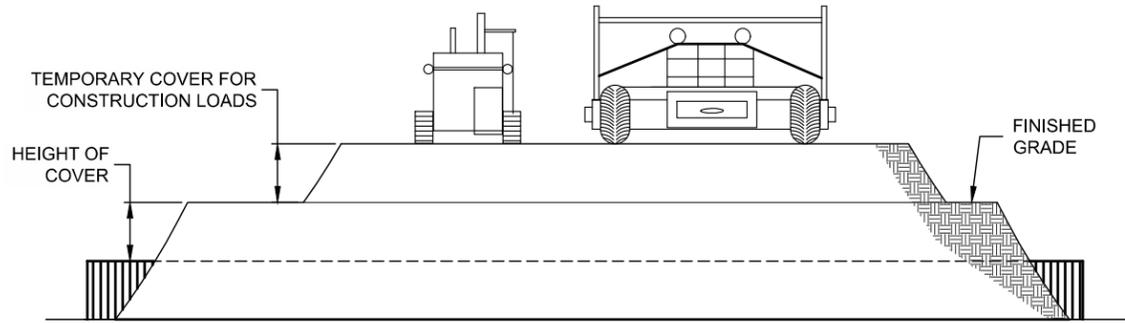
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96"Ø UNDERGROUND DETENTION SYSTEM - 636755-010
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P1 - WEST DETENTION

PROJECT No.: 636755	SEQ. No.: 010	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET NO.: P3 OF 4		



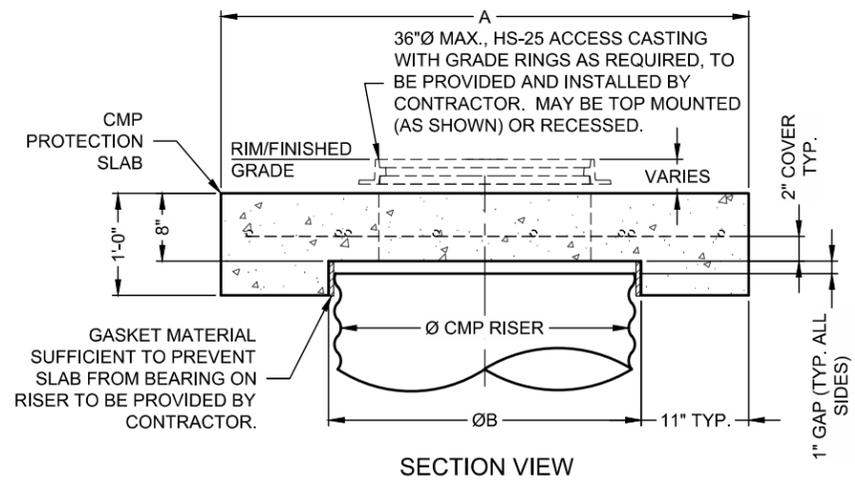
CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

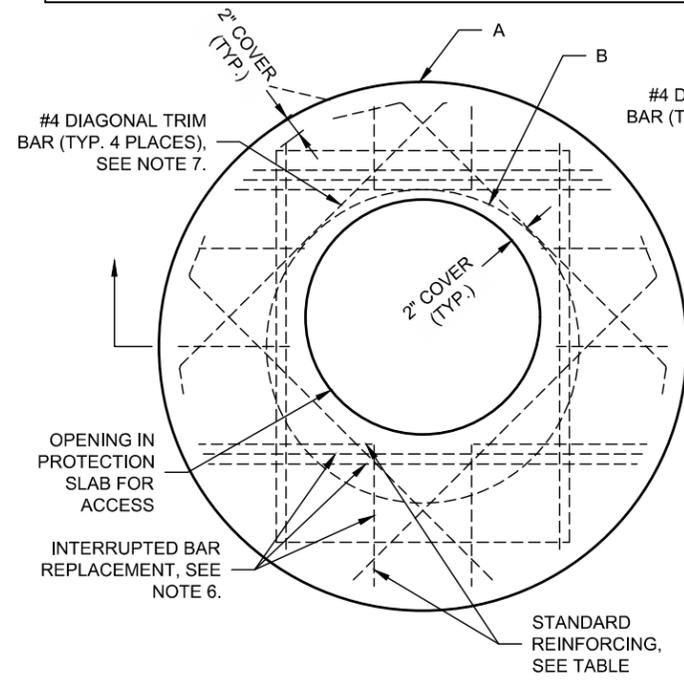


SECTION VIEW

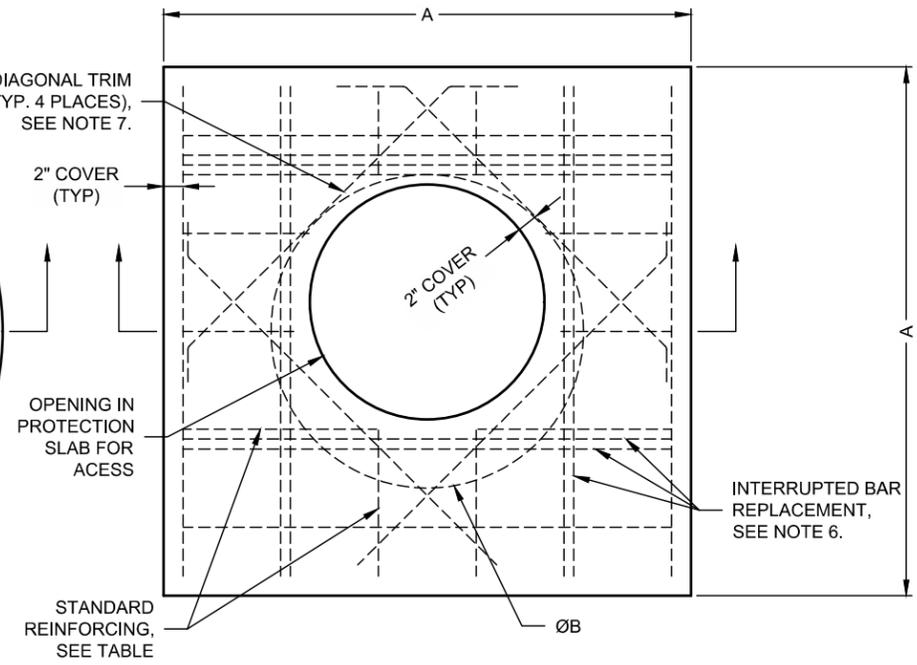
REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

- DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
- DESIGN LOAD HS25.
- EARTH COVER = 1' MAX.
- CONCRETE STRENGTH = 4,000 psi
- REINFORCING STEEL = ASTM A615, GRADE 60.
- PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

- TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

MATERIAL SPECIFICATION
NOT TO SCALE

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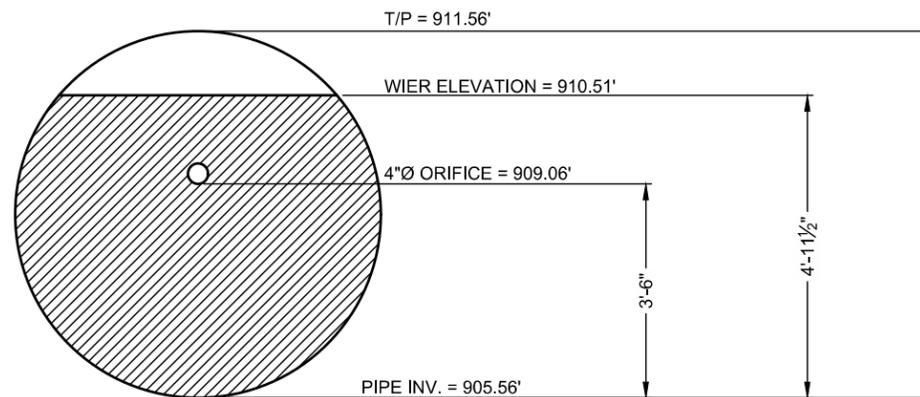
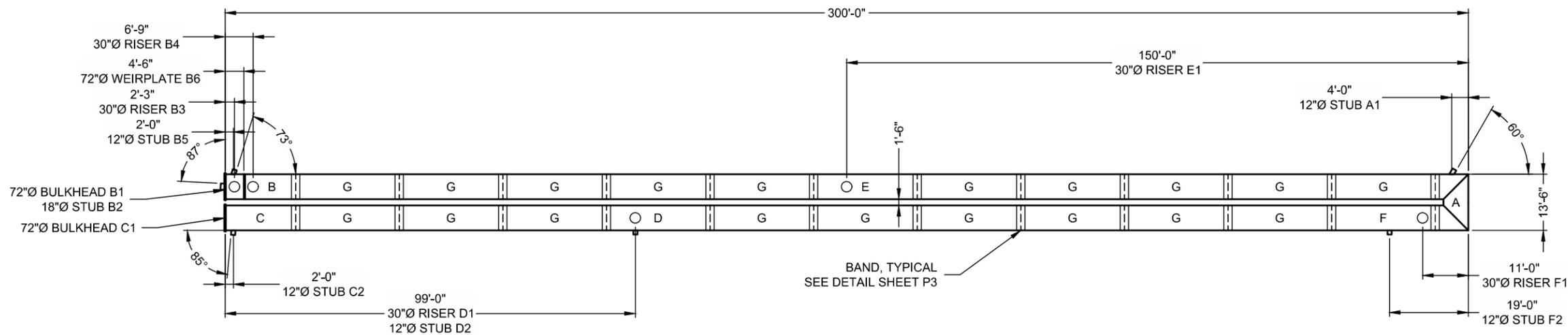
96"Ø UNDERGROUND DETENTION SYSTEM - 636755-010
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P1 - WEST DETENTION

PROJECT No.: 636755	SEQ. No.: 010	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET No.: P4	OF	4

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STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A1	909.06	905.56
18"Ø STUB B2	909.06	905.56
12"Ø STUB B5	910.06	905.56
12"Ø STUB C2	909.06	905.56
12"Ø STUB D2	910.06	905.56
12"Ø STUB F2	910.06	905.56

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
30"Ø RISER B3	913.78	905.56
30"Ø RISER B4	913.88	905.56
30"Ø RISER D1	916.34	905.56
30"Ø RISER E1	918.27	905.56
30"Ø RISER F1	918.29	905.56



WIER PLATE B6
1"=3'

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (4) PAGES INCLUDING THE FOLLOWING:

- PIPE STORAGE = 17,008 CF
- MAINLINE PIPE GAGE = 16
- WALL TYPE = SOLID
- DIAMETER = 72"
- FINISH = ALT2
- CORRUGATION = 5x1

CUSTOMER _____

DATE _____

ASSEMBLY

SCALE: 1" = 30'
PIPE STORAGE: 17,008 CF
LOADING: H20
PIPE INV. = 905.56'±

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
- ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD (EOR) PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2 1/2" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE AS REQUIRED, BY CONTRACTOR.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ACCESS CASTINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT SUPPLIED BY CONTECH.

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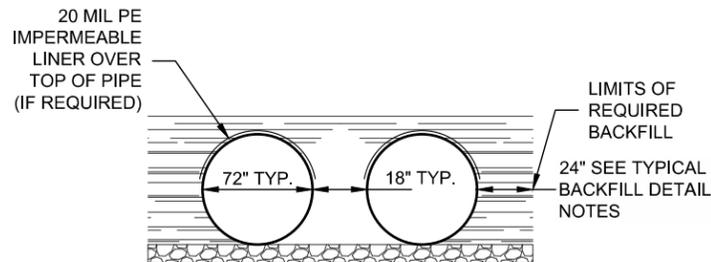
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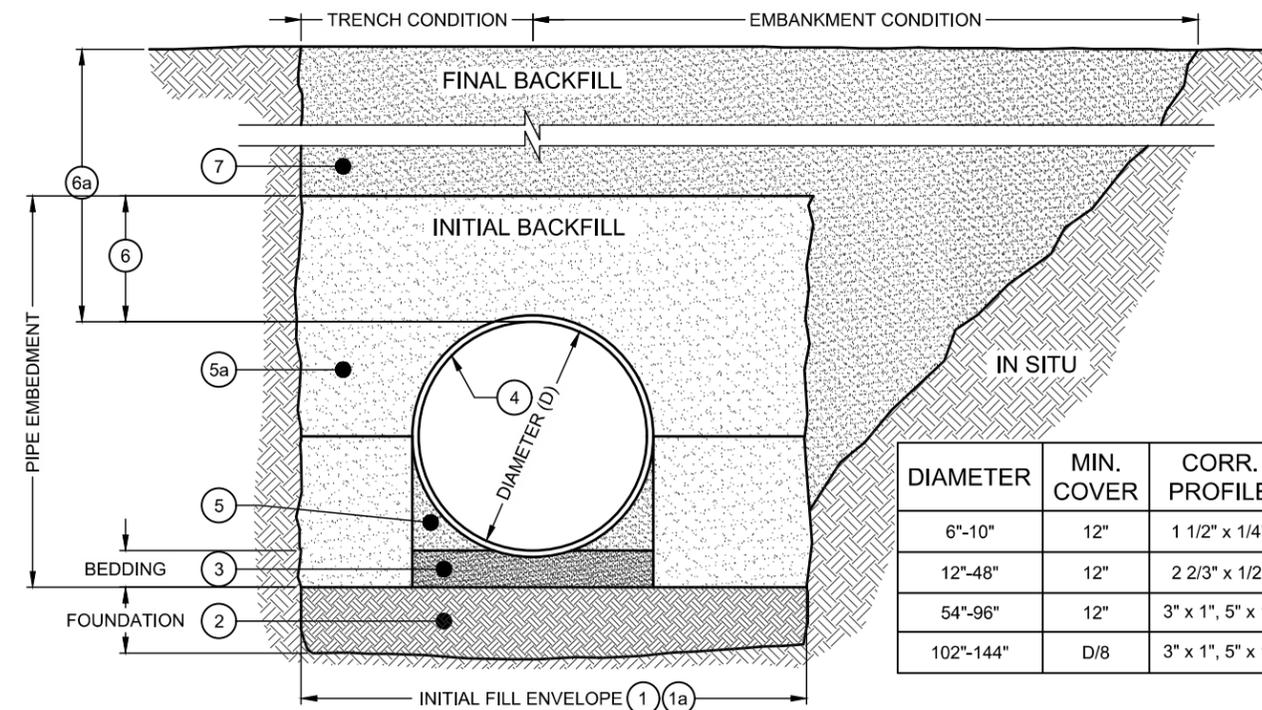
72"Ø UNDERGROUND DETENTION SYSTEM - 636755-020
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P2 - EAST

PROJECT No.: 636755	SEQ. No.: 020	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET NO.: P1	OF	4



TYPICAL SECTION VIEW
NOT TO SCALE

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.



BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

- 1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE MINIMUM TRENCH WIDTH (12.6.6.1):
 PIPE ≤ 12": D + 16"
 PIPE > 12": 1.5D + 12"
- 1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
 PIPE < 24": 3.0D
 PIPE 24" - 144": D + 4'0"
 PIPE > 144": D + 10'0"
- 2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
- 3 ENGINEER TO DETERMINE IF BEDDING IS REQUIRED. BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).
- 4 CORRUGATED STEEL PIPE (CSP / HEL-COR).
- 5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
- 5a INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
- 6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
- 6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
- 7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

- NOTES:**
- ENGINEER TO DETERMINE IF GEOTEXTILE SHOULD BE USED TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).
 - FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER.
 - CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

TYPICAL BACKFILL DETAIL
NOT TO SCALE

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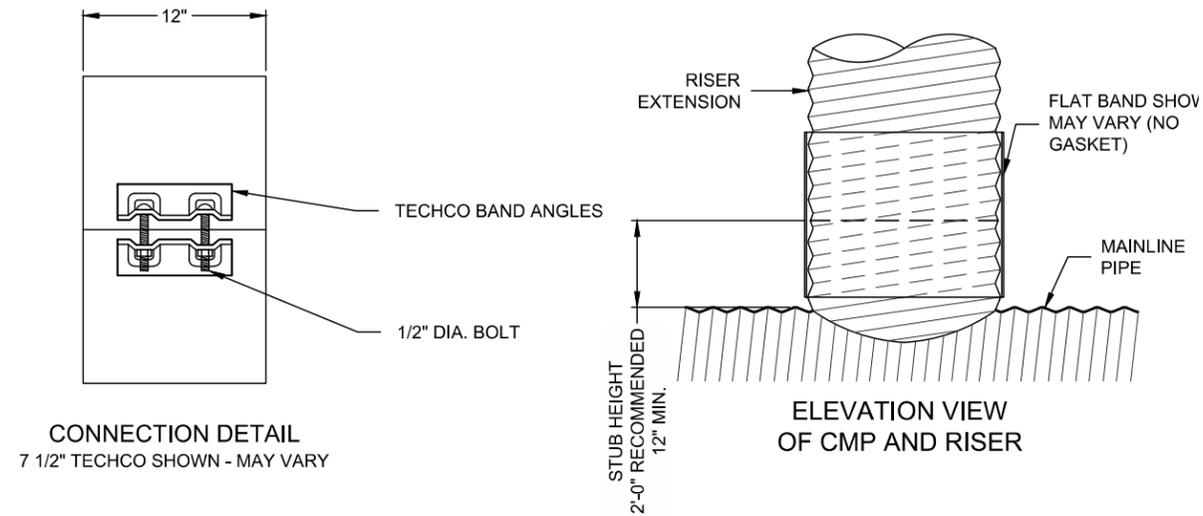
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CONTECH
CMP DETENTION SYSTEMS
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PROPOSAL
DRAWING

72"Ø UNDERGROUND DETENTION SYSTEM - 636755-020
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P2 - EAST

PROJECT No.: 636755	SEQ. No.: 020	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET NO.: P2	OF	4

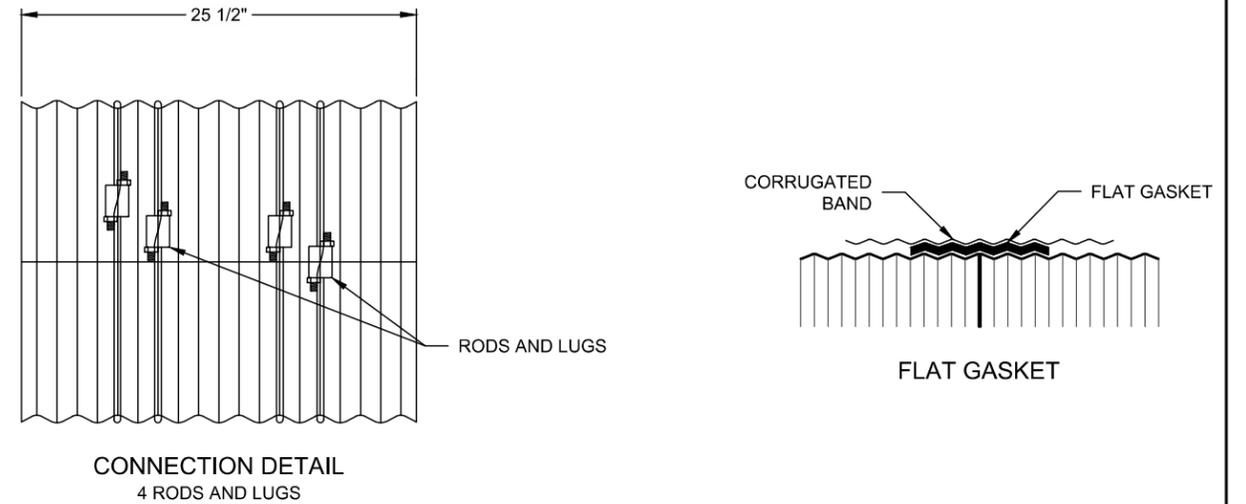


PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



2 2/3"x1/2" RIVETED PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" THRU 96" 2-PIECES
 - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
8. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

10-C BAND DETAIL
NOT TO SCALE

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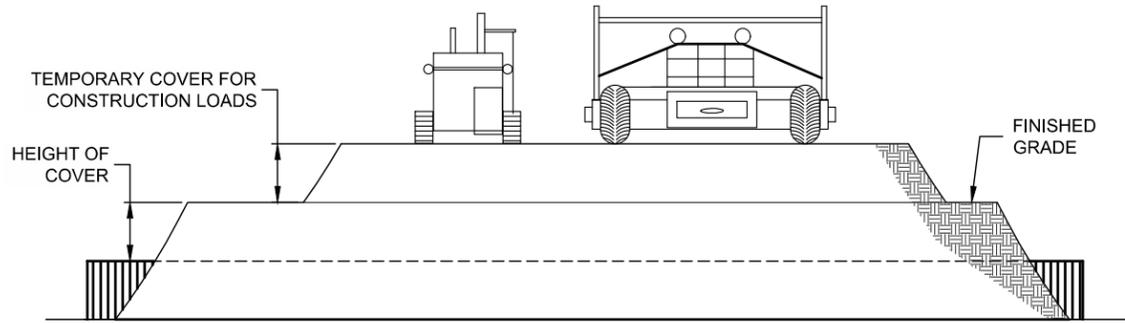
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72"Ø UNDERGROUND DETENTION SYSTEM - 636755-020
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P2 - EAST

PROJECT No.: 636755	SEQ. No.: 020	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED:	
SHEET NO.: P3 OF 4		



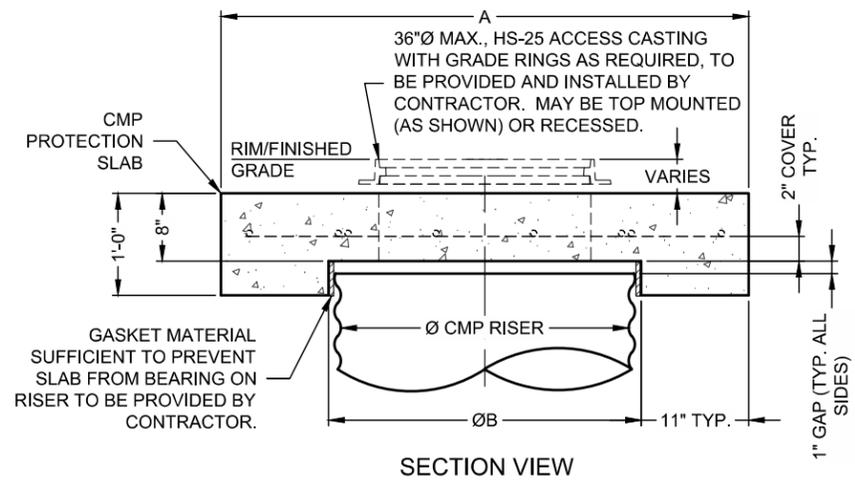
CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

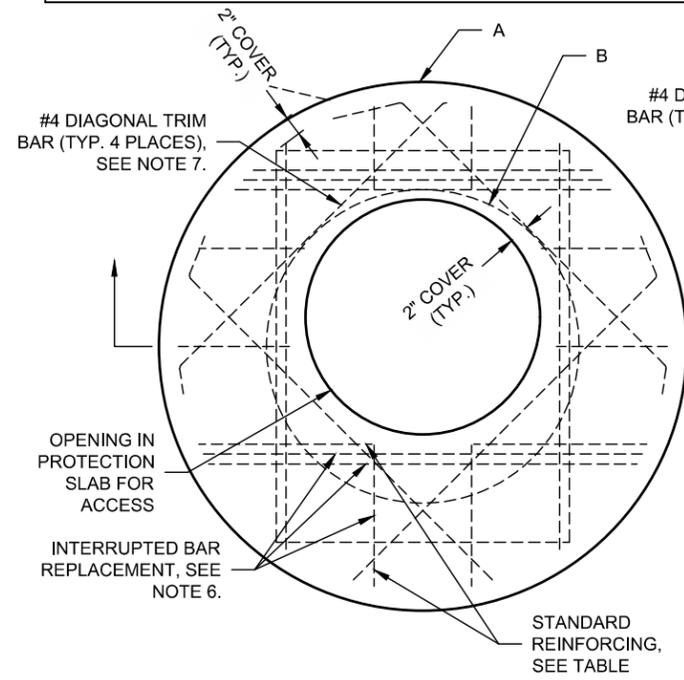


SECTION VIEW

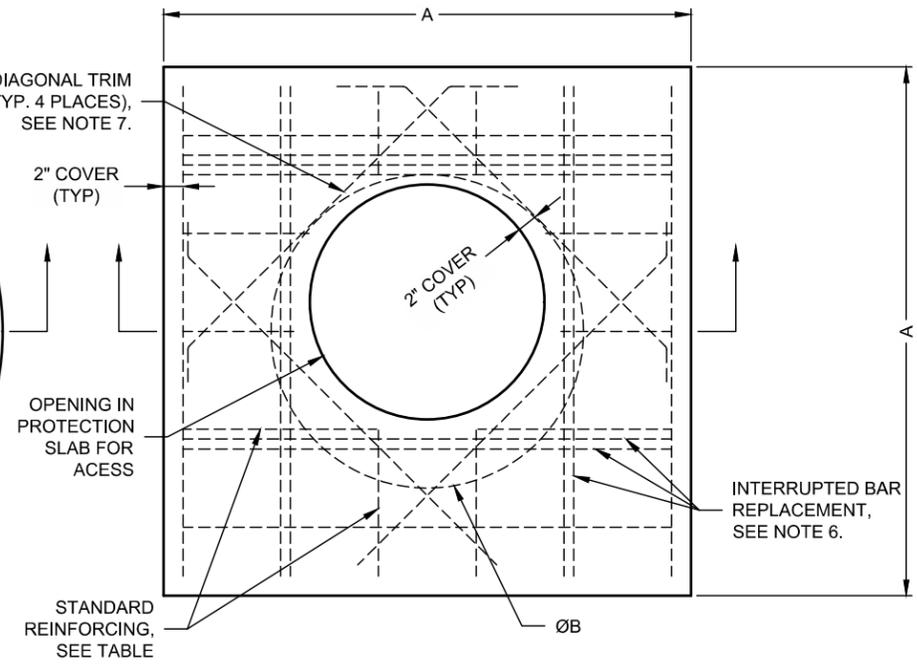
REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

- DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
- DESIGN LOAD HS25.
- EARTH COVER = 1' MAX.
- CONCRETE STRENGTH = 4,000 psi
- REINFORCING STEEL = ASTM A615, GRADE 60.
- PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

- TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

MATERIAL SPECIFICATION
NOT TO SCALE

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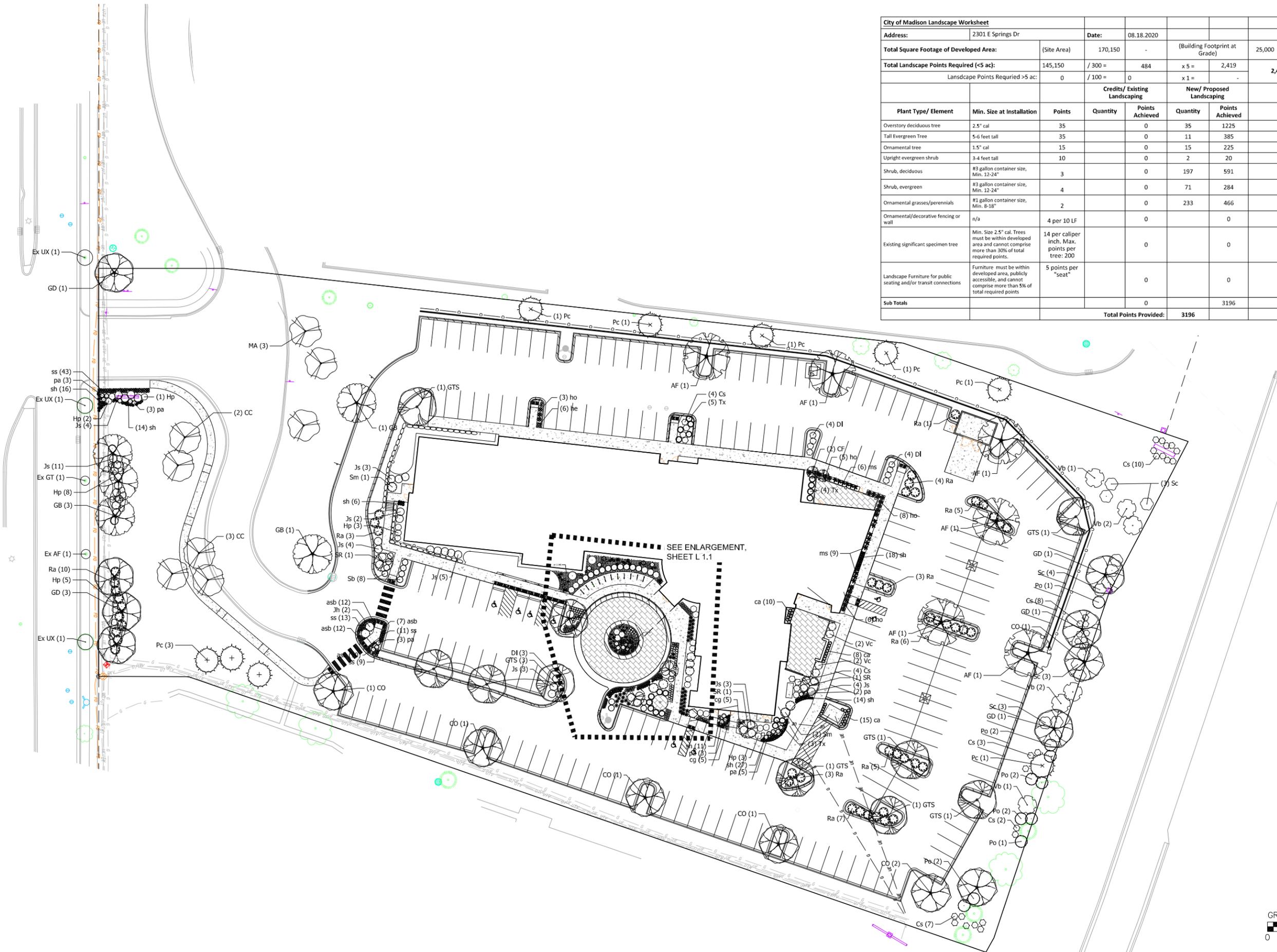
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72"Ø UNDERGROUND DETENTION SYSTEM - 636755-020
EAST SPRINGS DRIVE REDEVELOPMENT
MADISON, WI
SITE DESIGNATION: P2 - EAST

PROJECT No.: 636755	SEQ. No.: 020	DATE: 04/06/2020
DESIGNED: NDC	DRAWN: NDC	
CHECKED: NDC	APPROVED: 	
SHEET NO.: P4	OF	4

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City of Madison Landscape Worksheet						
Address:	2301 E Springs Dr		Date:	08.18.2020		
Total Square Footage of Developed Area:	(Site Area)	170,150	-	(Building Footprint at Grade)	25,000	= 145,150 sf
Total Landscape Points Required (<5 ac):	145,150 / 300 =	484	x 5 =	2,419		
Landscape Points Required >5 ac:		0 / 100 =	0	x 1 =	2,419	
Plant Type/ Element	Min. Size at Installation	Points	Credits/ Existing Landscaping		New/ Proposed Landscaping	
			Quantity	Points Achieved	Quantity	Points Achieved
Overstory deciduous tree	2.5" cal	35	0	0	35	1225
Tall Evergreen Tree	5-6 feet tall	35	0	0	11	385
Ornamental tree	1.5" cal	15	0	0	15	225
Upright evergreen shrub	3-4 feet tall	10	0	0	2	20
Shrub, deciduous	#3 gallon container size, Min. 12-24"	3	0	0	197	591
Shrub, evergreen	#3 gallon container size, Min. 12-24"	4	0	0	71	284
Ornamental grasses/perennials	#1 gallon container size, Min. 8-18"	2	0	0	233	466
Ornamental/decorative fencing or wall	n/a	4 per 10 LF	0	0	0	0
Existing significant specimen tree	Min. Size 2.5" cal. Trees must be within developed area and cannot comprise more than 30% of total required points.	14 per caliper inch. Max. points per tree: 200	0	0	0	0
Landscape Furniture for public seating and/or transit connections	Furniture must be within developed area, publicly accessible, and cannot comprise more than 5% of total required points	5 points per "Seat"	0	0	0	0
Sub Totals			0	0	3196	3196
			Total Points Provided:		3196	





COMcheck Software Version 4.1.2.1
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: Home2 Suites & Tru by Hilton
Project Type: New Construction

Construction Site: 2403 EAST SPRINGS DR, Madison East, WI 53704
Owner/Agent: JAY PATEL, HAWKEYE HOTELS, 6251 JOLIET ROAD, COUNTRYSIDE, IL 60525
Designer/Contractor: Ardebili Engineering, LLC, 8100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251, 480.626.7072, info@ardebiling.com

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B X C)
1-Hotel	113464	0.78	88558
Total Allowed Watts =			88558

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Hotel				
LED 1: C1: CEILING LAMP: Other:	1	10	32	320
LED 2: F: PENDANT: Other:	1	1	225	225
LED 3: J: WALL SCONCE: Other:	1	115	36	4140
LED 4: L-Q3: RECESSED DOWNLIGHT: Other:	1	83	21	1743
LED 5: LP-400: VANITY FIXTURE: Other:	1	83	60	4980
LED 6: ND-1699: DECORATIVE PENDANT: Other:	1	12	75	900
LED 7: PA-300: DECORATIVE PENDANT: Other:	1	3	20	60
LED 8: PA-301: DECORATIVE PENDANT: Other:	1	3	20	60
LED 9: PA-308: LINEAR LED: Other:	1	6	20	120
LED 10: PA-309-2: LINEAR LED: Other:	1	4	20	80
LED 11: PR: SURFACE MOUNT: Other:	1	3	18	54
LED 12: R1: RECESSED DOWNLIGHT: Other:	1	236	36	8496
LED 13: R2: RECESSED DOWNLIGHT: Other:	1	17	36	612
LED 14: T2: 2X4 LAYIN: Other:	1	22	96	2112
LED 15: T3: 1X4 SURFACE: Other:	1	16	64	1024
Total Proposed Watts =				24926

Project Title: Home2 Suites & Tru by Hilton
Data filename: C:\Users\AEL-01\Dropbox (Ardebili Engineering)\Ardebili Engineering\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru\Shared\Energy\IECC.cck
Report date: 03/06/20
Page 1 of 10

Interior Lighting PASSES: Design 72% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.2.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

GILBERTO HERNANDEZ - PROJECT MANAGER
Name - Title
Gilberto Hernandez
Signature
3/6/20
Date



COMcheck Software Version 4.1.2.1
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: Home2 Suites & Tru by Hilton
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district)

Construction Site: 2403 EAST SPRINGS DR, Madison East, WI 53704
Owner/Agent: JAY PATEL, HAWKEYE HOTELS, 6251 JOLIET ROAD, COUNTRYSIDE, IL 60525
Designer/Contractor: Ardebili Engineering, LLC, 8100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251, 480.626.7072, info@ardebiling.com

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Parking area	86364 ft ²	0.06	Yes	5182
Driveway	17062 ft ²	0.06	Yes	1024
Total Tradable Watts (a) =				6206
Total Allowed Supplemental Watts (b) =				600
Total Allowed Supplemental Watts (b) =				600

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Parking area (86364 ft ²): Tradable Wattage				
LED 1: SA: DUAL HEAD POLE: Other:	1	5	268	1340
LED 2: SB: SINGLE HEAD POLE: Other:	1	9	134	1206
LED 3: SO: SINGLE HEAD POLE: Other:	1	2	134	268
LED 5: SFE: WALL SCONCE: Other:	1	6	25	150
LED 6: SGE: DOWNLIGHT: Other:	1	1	10	10
LED 7: SH: FESTOON: Other:	1	78	2	137
Driveway (17062 ft ²): Tradable Wattage				
LED 4: BD: BOLLARD: Other:	1	41	31	1271
Total Tradable Proposed Watts =				4362

Project Title: Home2 Suites & Tru by Hilton
Data filename: C:\Users\AEL-01\Dropbox (Ardebili Engineering)\Ardebili Engineering\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru\Shared\Energy\IECC.cck
Report date: 03/06/20
Page 3 of 10

Exterior Lighting PASSES: Design 36% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.2.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

GILBERTO HERNANDEZ - PROJECT MANAGER
Name - Title
Gilberto Hernandez
Signature
3/6/20
Date

Project Title: Home2 Suites & Tru by Hilton
Data filename: C:\Users\AEL-01\Dropbox (Ardebili Engineering)\Ardebili Engineering\01_Projects\2019\19280_DC_H2S&Tru Madison, WI\10_H2S&Tru\Shared\Energy\IECC.cck
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1775 VILLAGE CENTER CIRCLE #110
LAS VEGAS, NV 89134, T. 702.403.1575
WWW.DESIGNCELL.COM



HOME2 SUITES & TRU BY HILTON
5-STORY, 219 GUESTROOMS
PROJECT NO.: 19-157ND / MSNMDHT / ID NO:55260 (H2S)
PROJECT NO.: 19-158ND / MSNMRU / ID NO:55261 (TRU)
2403 EAST SPRINGS DR, MADISON, WI

PERMIT SUBMITTAL 03/12/2020

REVISIONS:

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PROJECT NUMBER: 18 068

IECC REPORTS



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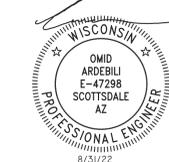
Project Number: 19280 | Project Manager: GH
8100 E Indian School Rd, Suite 205, Scottsdale, AZ 85251
P: 480.626.7072 | ardebiling.com



Hawkeye Hotels

designcell ARCHITECTURE

1725 VILLAGE CENTER CIRCLE #110
LAS VEGAS, NV 89134. T. 702.403.1575
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HOME2 SUITES & TRU BY HILTON

5-STORY, 219 GUESTROOMS

PROJECT NO.: 19-157ND / MSNMDHT / ID NO: 55260 (H2S)

PROJECT NO.: 19-158ND / MSNMRU / ID NO: 55261 (TRU)

2403 EAST SPRINGS DR., MADISON, WI

PERMIT SUBMITTAL 03/12/2020

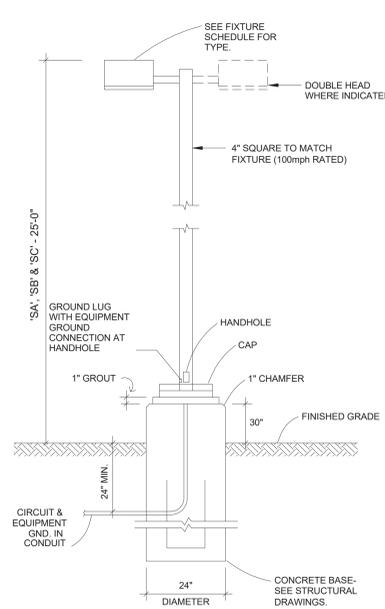
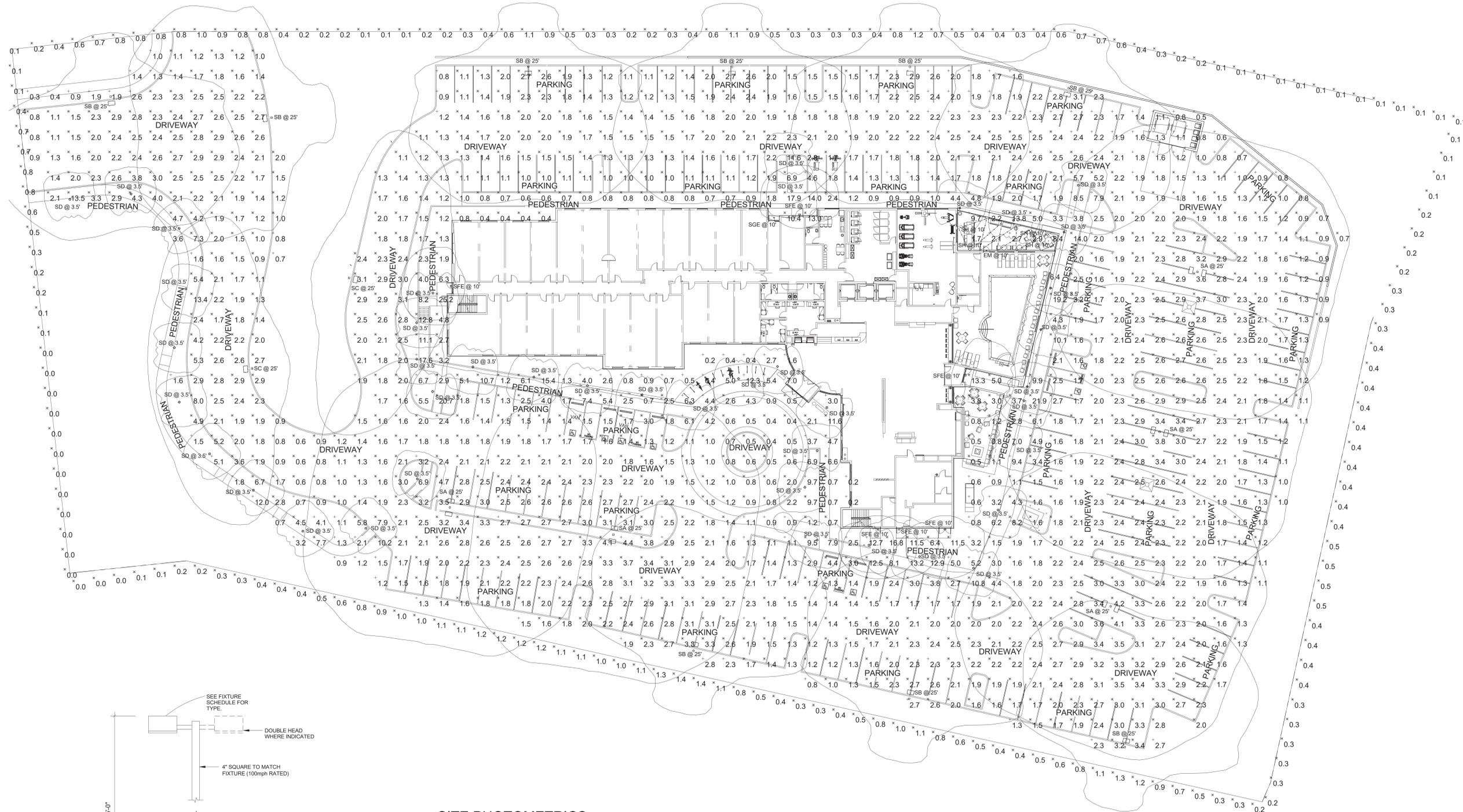
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PROJECT NUMBER: 19 066

SITE PHOTOMETRICS

E1.02



LIGHT POLE 'SA', 'SB' & 'SD'

NOTE: CONTRACTOR SHALL PROVIDE NEW POLE BASES WHERE INDICATED ON PLANS. LIGHTING FIXTURE POLE DETAILS AND DESCRIPTIONS ARE FOR ELECTRICAL REFERENCES ONLY. THE POLE AND BASE SHALL BE DESIGNED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN AND BE STAMPED AND SEALED ACCORDINGLY AS A DEFERRED SUBMITTAL.

1 SITE PHOTOMETRICS

1" = 20'-0"

Table with columns: Schedule, Symbol, Label, Quantity, Manufacturer, Catalog Number, Description, Lamp, Filename, Lumens Per Lamp, Light Loss Factor, Wattage. Includes rows for SA, SB, SC, SD, SFE, SGE, SH, EM.

Table with columns: Statistics, Description, Symbol, Avg, Max, Min, Max/Min, Avg/Min. Lists fixture types and their performance metrics.

ARDEBILI Engineering logo and contact information.

03/12/2020 14:53:40

