

TOWN OF WINTER PARK PLANNING COMMISSION Tuesday, March 12, 2024 8:00 AM

AGENDA

I. Call to Order

II. Roll Call of Commission Members

III. Public Comment

This time is reserved for anyone from the public to speak about items not on the agenda. The Planning Commission is not prepared to decide on matters brought up during this time, but if warranted, will place them on a future agenda.

IV. Conflict of Interest

V. Consent Agenda:

a. Approval of Minutes - February 27, 2024

VI. General Business:

- a. Minor Site Plan 12, 16, 20, 24, 28, 30, 34, and 38 Wheeler Road (Building 1) and 52, 56, 60, 62, 66, and 70 Wheeler Road (Building 2) Sojourn at Idlewild Subdivision (PLN24-012 and PLN24-013) *Continued from February 27, 2024*
- b. Minor Site Plan 101, 103, 105, and 107 Atlas Circle Lots 1-4, Retreat at Atlas (PLN24-017)
- c. PUBLIC HEARING: UDC Text Amendment No, 7, Amending Sec. 3-C-3-4, Wetlands (PLN23-075)
- d. Three-Mile Plan Adoption (PLN19-003)

VII. Director's Report:

This time is reserved for specific items from staff requiring Commission direction and for relaying important information to the Commission.

- a. Informational Article The Path to Safety How Road Diets Can Save Lives
- b. Planning Magazine Winter 2024

VIII. Planning Commission Items of Discussion

This time is reserved for Commission discussion items that are not listed on the agenda.

Online Meeting Login Instructions – See next page

Computer Login Instructions

Please click the link below to join the webinar: <u>https://us02web.zoom.us/j/81725744995?pwd=RnVOb2hpVmN1SXBydzFBZEc3NGhGZz09</u> Passcode: 113389

Phone Login Instructions

Dial In Numbers (for higher quality, dial a number based on your current location):

+1 719 359 4580 US +1 253 205 0468 US +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston) +1 669 444 9171 US +1 669 900 6833 US (San Jose) +1 564 217 2000 US +1 646 931 3860 US +1 689 278 1000 US +1 929 436 2866 US (New York) +1 301 715 8592 US (Washington DC) +1 305 224 1968 US +1 309 205 3325 US +1 312 626 6799 US (Chicago) +1 360 209 5623 US +1 386 347 5053 US +1 507 473 4847 US Webinar ID: 817 2574 4995 Passcode: 113389 International numbers available: https://us02web.zoom.us/u/kdr9la1HH0

You can log into the Zoom meeting through the link above to view what is projected on the screen. You can use either your computer audio or the number above. Everyone will be muted upon entry into the meeting to ensure that we have manageable background noise and limited interruptions.

Public Hearing Process

If you would like to participate in the public hearing, please follow these instructions so we can make sure everyone that wants to speak has the opportunity. When you log into Zoom you will be automatically muted to limit background noise. When the public hearing is opened for public comment, please use the "raise your hand" feature and staff will unmute citizens in the order they were received. To enable "raise your hand" feature, click on the "Participants" button the bottom of the screen.



TOWN OF WINTER PARK PLANNING COMMISSION Tuesday, February 27, 2024 8:00 AM

MINUTES

DATE:	Tuesday, February 27, 2024
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MEETING: Winter Park Planning Commission

PLACE: Town Hall Council Chambers and Zoom Meeting Call

PRESENT: Chair Dave Barker, Vice Chair Brad Holzwarth, and Commissioners Doug Robbins, Thomas McDonald, Angela Sandstrom and Roger Kish are present. Also present are Community Development Director James Shockey, Town Planner Hugh Bell, Contracted Town Planner Shelia Booth (on Zoom), and Assistant Town Attorney Kunal Parikh (on Zoom).

OTHERS PRESENT: None.

I. **Call to Order** Chair Barker calls the meeting to order at 8:02 a.m.

II. Roll Call of Commission Members Commissioner Chris Tagseth is absent today.

III. Public Comment No comments received.

IV. Conflict of Interest

No one comes forward.

V. Consent Agenda:

a. Approval of Minutes - February 13, 2024

Commissioner Robbins moves and Commissioner McDonald seconds the motion approving the Consent Agenda. Motion carries 6, 0.

VI. General Business:

 a. PUBLIC HEARING: Major Site Plan – 115 Discovery Drive – Metes and Bounds Property – Winter Park Resort Snowmaking System Phase II Upgrade (PLN24-010)

Town Planner Hugh Bell presents the staff report to the Commissioners. Applicant Doug Laraby, Planner for Winter Park Resort, is present in the Chambers.

Planner Bell states that Staff recommends approval with five (5) conditions.

The Commissioners begin discussions amongst themselves and Staff. Vice Chair Holzwarth asks if the parking spaces will be paved or not. Planner Bell states these will be dirt spaces since the project is located on USFS property within the ski area. Chair Barker opens the public hearing. No one comes forward, so Chair Barker closes the public hearing. The Commission and the Staff clarify the type of parking during the summer season.

The applicant, Mr. Doug Laraby comes forward. The Commission does not have questions for Mr. Laraby.

Vice Chair Holzwarth moves and Commissioner Sandstrom seconds the motion approving the Major Site Plan for 115 Discovery Drive (PLN24-010) with Staff's five (5) conditions outlined in the staff report. Motion carries 6,0.

b. Minor Site Plan – 12, 16, 20, 24, 28, 30, 34, and 38 Wheeler Road (Building 1) and 52, 56, 60, 62, 66, and 70 Wheeler Road (Building 2) – Sojourn at Idlewild Subdivision (PLN24-012 and PLN24-013)

Town Planner Hugh Bell presents the staff report to the Commissioners. The Applicant is not present. Under the Outdoor Lighting section, staff is adding a condition that all fixtures comply with the 850-lumen limit as the Lithonia DSXW1 fixture has 5,752 lumens. Under the "Planning Commission Items for Discussion" section there is one item to discuss, which relates to building materials and colors. In total, staff recommends approval with twelve (12) conditions.

The Commissioners begin discussions amongst themselves and Staff. The Commissioners have several comments and questions, which generally include:

- 1. The Commissioners agree that they'd prefer to see another color scheme besides white board and batten with white stone since it is not an earth tone color.
- 2. Brick is not allowed in the R-C zone district; per § 3-B-3, Building Material Standards, it is only permitted in the D-C district.
- 3. The depiction of the brick in the renderings is stone, but the callout image shows brick.
- 4. There are five (5) color schemes shown for the Building 1 model, even though only four (4) are described on the Renderings sheet (i.e. the blue color is not indicated).
- 5. A physical materials board would be helpful to understand the proposed colors and materials, which specifically include the board and batten, stone, and garage doors.
- 6. The fronts of the townhome buildings are less articulated than desired.

Commissioner Kish moves and Commissioner Robbins seconds the motion to continue this item to the next Planning Commission meeting on March 12th, 2024 and to add two (2) conditions in addition to staff's twelve (12) conditions:

- 1. Applicant shall provide a physical materials board depicting the proposed colors and materials for the board and batten, stone, and garage doors.
- 2. Applicant shall clarify the proposed color and material schemes for these building model types so that there are no discrepancies between submittal documents.

Motion carries 6,0.

VII. Director's Report:

Director Shockey states that the Three-Mile Plan has been under review. He presents the existing Plan on the screen. The Commissioners begin discussions amongst themselves and Staff. The Commissioners have several comments and questions, which generally include:

- 1. Suggested language modifications.
- 2. Has Fraser mentioned the Denver Water West parcel in their Three Mile Plan?
- 3. The Mountain Parks parcel has been sold to a private party by Mountain Parks Electric Incorporated. If more than four (4) dwelling units are proposed, then a traffic study should be required.
- 4. The Pyne and Beaver Village parcels have been annexed into the Town so they can be removed from the Plan.
- 5. The Valley Hi parcel's retail marijuana store has closed. The Plan should reference that the parcel became eligible for an enclave annexation by the Town in 2020 given the Roam parcel was annexed in 2017.
- 6. The Snowshoe parcel should be referred to Town Council with the note it's considered as an enclave annexation. The Town also desires to obtain a trail easement to continue the existing Trailhead Trail to the north to connect with Ski Idlewild Road.

- 7. For the US Forest Service parcel, it should be referenced that Corona Pass Road is also a Grand County Road (GCR 80). Correct "20 park" to "20-acre park".
- 8. On the Denver Water East parcel, consideration should be given to the adjacent wilderness; perhaps a buffer between the developable land and wilderness should be required upon development of the parcel.

Regarding the Priorities List, Director Shockey mentions the Parking Study that will commence next month.

Director Shockey and Planner Bell will attend Planner's Day at the Capitol tomorrow in Denver to learn about current bills proposed in the state House of Representatives and Senate.

VIII. Planning Commission Items of Discussion

There are no items to discuss.

There being no further business to discuss, upon a motion regularly adopted, the meeting was adjourned at 9:32 a.m.

The next scheduled meeting of the Planning Commission will be Tuesday, March 12, 2024, at 8:00 a.m.

Irene Kilburn, Building, Planning Technician II and Hugh Bell, Town Planner



MEMO

то	Planning Commission
FROM	Hugh Bell, Planner
THROUGH	James Shockey, AICP, Community Development Director
DATE	March 12, 2024
RE	Minor Site Plan – 12, 16, 20, 24, 28, 30, 34, and 38 Wheeler Road (Building 1) and 52, 56, 60,
	62, 66, and 70 Wheeler Road (Building 2) – Sojourn at Idlewild Subdivision (PLN24-012 and
	PLN24-013)

Property Owner: Highland Development Company

Applicant: Ryan Hanneman of RHAP Architecture and Planning

Architect: Ryan Hanneman of RHAP Architecture and Planning

Legal Description:

Lots 1-14, Sojourn at Idlewild Subdivision (the "Property").

Zoning: P-D (Planned Development) with R-C (Residential-Commercial) underlay. The property was annexed into the Town in 2007; the Annexation and Zoning Plan (the "AZP") governs the development standards (Reception No. 2007012395).

Authority:

Pursuant to § 5-B-3 of the Winter Park Unified Development Code (the "UDC"), the Planning Commission considers building configurations, colors, materials and general compatibility of proposed structures and outdoor advertising within the Town of Winter Park. Minor Site Plan approval is required before building permit issuance.

Variances:

No Board of Adjustment (BOA) or Administrative Variance Requests are included with the application.

Architecture:

Two (2) new townhome complexes, Buildings 1 and 2. Building 1 contains eight (8) dwelling units ("DU"). Lots 1 and 8 have a two-car garage and Lots 2-7, a single-car garage. Building 2 contains six (6) DU. All lots (9-14) contain only a single-car garage.

Title Commitment:

Satisfactory.

50 Vasquez Rd P.O. Box 3327	970-726-8081
Winter Park, Colorado 80482	www.wpgov.com



Homeowner's Association Review:

N/A. The HOA has not yet been created. All lots are under the same ownership, and the owner has approved the designs.

Density:

Satisfactory. 20 DU/acre are permitted for Single Family Attached ("SFA") uses. Density was approved with the Final Plat.

Minimum Lot Dimensions:

N/A. The AZP does not stipulate minimum lot dimensions for SFA uses.

Material and Color:

Partially satisfactory. Window glass type has been indicated as containing no reflective coating so it is satisfactory. The white brick veneer has been replaced with grey limestone, which staff believes now meets the intent of Guideline 3.8.2 from the Design Guidelines, which suggests "incorporat[ing] materials with natural (earth) tones and muted colors". Additionally, per § 3-B-3, Exterior Building Materials Standards, brick isn't permitted in the R-C zone. It is unclear if the white board and batten is still proposed for both buildings.

> Applicant shall indicate exterior color schemes for the buildings.

Outdoor Lighting:

Partially satisfactory. Three (3) fixtures are proposed, all which contain the International Dark Sky Association (IDA) approval stamp (UDC, § 3-K-3(A)(1)). The Kichler 7" Cylinder fixture's spec sheet does not show the stamp but the IDA website does. Single-family properties, including multiple residential properties not having common areas, are limited to 5,100 lumens and each fixture shall not exceed 850 lumens. The average lot contains 3,846 lumens. A photometric plan was submitted showing the mounting height and fixture type on each building. Both Lithonia fixtures well exceed the 850-lumen limit. Once the fixtures are compliant with the lumen maximum (850 lumens), staff will analyze to ensure each DU is within the 5,100-lumen limit.

Applicant clarified that no outdoor soffit lighting is proposed.

Photometric plans are not required for single-family attached or detached DU; however, the Applicant submitted this and has indicated mounting heights here.

Fixture Name	Proposed #	Proposed	t k	Proposed
	of Fixtures	Lumens per		ССТ
		Fixture		
Lithonia Lighting	BLD 1: 2	1,500	(3,000	3000K
ARC1 LED-P1-30K-	BLD 2: 0	total)		
MVOL T				
Lithonia Lighting	BLD 1: 1	5,752	(17,256	3000K



DSXW1 LED 20C 1000 30K TFTM MVOL T HS	BLD 2: 2	total)	
Kichler Lighting 92348K	BLD 1: 24 BLD 2: 18	800 (33,600 total)	3000K
		Total = 53,856 lumens. Average = 3,846 lumens per lot (14 lots).	

- > Applicant shall revise outdoor lighting so all fixtures comply with the 850 lumen limit per fixture.
- > Applicant shall revise photometric plan to reflect the new fixtures.
- Applicant shall revise Outdoor Lighting Tabulation on Minor Site Plan Application Form to reflect the new fixtures.

Accessory Dwelling Unit (ADU):

N/A. No ADUs are proposed.

Site Plan:

Satisfactory.

Floorplans:

Satisfactory.

Building Elevations:

Partially satisfactory. There are unscreened gas and electric meters on both sides of the buildings; those which are visible from public view shall be screened in accordance with § 2-B-4(D), Mechanical Equipment and Meters.

The unscreened gas and electric meters on both sides of the buildings which are visible from public view shall be screened in accordance with § 2-B-4(D), Mechanical Equipment and Meters.

Setbacks:

Satisfactory. Setbacks for townhomes (SFA) are measured from the overall property lines and not from individual lot lines. Setbacks for SFA are as follows: 25' front yard, 20' rear yard, 10' side yard, and 15' corner yard.

Building Coverage:

Satisfactory. The AZP allows 50% building coverage for DU lots. The Plat meets this requirement. This building coverage calculation is made using the 19.910-acre portion of the property (See table on Sheet 2 of the Plat). Overall, 18.35% of the property is comprised of building footprints.

Building Height:



Satisfactory. Maximum midpoint building height is limited to 35' (33'-6" proposed for Building 1 and 32'-7" for Building 2).

Parking:

Satisfactory. Parking requirements are outlined in Plat Note 2:

2.) PARKING REQUIREMENTS SHALL COMPLY WITH THE TOWN OF WINTER PARK STANDARDS AND SPECIFICATIONS FOR DESIGN AND CONSTRUCTION.

Each DU contains three (3) bedrooms, so two (2) off-street parking spaces are required per DU. Parking is permitted on the driveways.

Building 1: Lots 1 and 8 have a two-car garage and Lots 2-7 have a single-car garage. For Lots 2-7, the other required space is provided in the driveway.

Building 2: All lots (9-14) contain only a single-car garage, so the other required space is provided in the driveway.

Off-Street Parking Requirements								
Use	Standard	# DU/# Bedrooms (br)/Sq. Ft.	Parking Required	Parking Provided				
SFA (townhome/duplex)	1 space per 1br 1.5 spaces per 2br 2 spaces per 3+br	14 3+br DU	28	32				

Bufferyards and Revegetation:

Satisfactory. The entire subdivision is subject to the 1997 Landscape Design Regulations and Guidelines, which require Land Use Transition Zones (LTZs). The Landscaping Plan dated 09/27/2023 that was submitted and approved with the Final Plat Application (PLN22-091) was submitted with this application. No fencing is proposed for the DU; it is proposed only for the condo building private yards.

Condition No. 2 from Resolution 2078 approving the Final Plat states, "If field edits during construction necessitate changes to the approved Landscaping Plan dated May 26, 2023, such amendments shall be reviewed by the Community Development Director to ensure compliance with the applicable landscaping regulations."

- If field edits during construction necessitate changes to the approved Landscaping Plan dated May 26, 2023, such amendments shall be reviewed by the Community Development Director to ensure compliance with the applicable landscaping regulations.
- Any disturbed areas on the site shall be revegetated with the seed mix recommended by the Grand County Natural Resource Conservation Service, which mix composition is described in Section 7.4 of the Standards and Specifications for Design and Construction.

Snow Storage:

Satisfactory. Section 3.11 of the Standards requires that a minimum of 25% of all driving surfaces, including gravel shoulders, parking areas, and pedestrian walkways are designated for snow storage.



Throughout the subdivision, these surfaces comprise 185,500 sqft. Per pg. 2 of the Plat, at least 46,375 sqft of snow storage are required for the subdivision, and 48,525 sqft are proposed. A 15' easement for snow storage (and utilities and drainage) is provided at the front of all lots on the north side of Wheeler Road.

Snow storage locations are shown on the Site Plans dated 02/13/2024 but the dimensions aren't indicated. However, per the Plat, snow storage is permitted within all easements, outlots, and tracts, minus wetlands.

There are two (2) plat notes regarding snow storage:

- 6.) THE METRO DISTRICT IS RESPONSIBLE FOR SNOW REMOVAL WITHIN THE PRIVATE STREETS. SNOW SHALL NOT BE PUSHED OR STORED ON PUBLIC RIGHT-OF-WAY. DURING MAJOR SNOW EVENTS, SNOW IS TO BE HAULED OUT. THE TOWN OF WINTER PARK SHALL BE RESPONSIBLE FOR SNOW REMOVAL WITHIN THE TERMS OUTLINED IN THE SOJOURN AT IDLEWILD FINAL DEVELOPMENT PLAN SECTION 7.2.1.3.
- 11.) SNOW REMOVAL ACTIVITIES, AND SNOW STORAGE, SHALL NOT BE PERMITTED WITHIN ANY WETLAND AREA.

Erosion Control / Drainage Plan / Drainage Report / Grading / Engineer Review:

TBD. The Town Engineer is reviewing the Grading and Drainage Plan and staff will forward comments when they arrive.

- Should the Town Engineer have comments, Applicant shall revise Grading and Drainage Plan accordingly.
- Approved drainage and erosion control shall be in place prior to and throughout site preparation and construction and through successful revegetation.

Driveway:

TBD. The following driveways exceed a 5% slope, which is the maximum slope permitted for the first 24' of a driveway per Section 4.4, Alignment, in the Standards:

- Lot 7 (Building 1): 5.7%
- Lot 8 (Building 1): 8.0%
- Lot 10 (Building 2): 5.2%
- Lot 11 (Building 2): 6.2%
- Lot 12 (Building 2): 6.6%
- Lot 13 (Building 2): 7.5%
- Lot 14 (Building 2): 8.0%

Applicant has submitted Administrative Variance Requests for the Town Engineer's review as required in the Standards, Section 8.1, Variances. The Town Engineer is reviewing these now.

- The Town Engineer shall review the Administrative Variance Requests to exceed maximum driveway slopes in accordance with the Standards, Section 8.1, Variances.
- > A stabilized construction entrance shall be installed prior to ground disturbance.

Access:



Satisfactory. All DU are accessed via Wheeler Road, a private access easement. Accesses were approved by the Town Engineer during the Final Plat review process.

Utility Review:

N/A. The utility companies already reviewed and approved utility layouts during the Final Plat process.

Wetlands:

Satisfactory. Both buildings encroach into existing non-jurisdictional wetlands. The Planning Commission, Town Council, and Town Engineer must approve all wetland encroachments per § 7-3-8 of Town Code. This encroachment has been approved by all three bodies. No jurisdictional wetlands are adjacent to the buildings.

Pre-Disturbance Inspection:

N/A. Overlot grading is occurring for the entire subdivision.

Staff Recommendation:

The Planning Commission reviewed this application on Tuesday, February 27 and continued it to today's hearing with staff's eleven (11) conditions. They also added three (3) conditions at the meeting (#s 12, 13, and 14). The conditions that have been struck have been addressed by the Applicant since the hearing:

- 1. Applicant shall indicate window glass type.
- 2. Applicant shall clarify if the Building 2's Renderings or Material Board should be referenced for the correct proposed color of brick veneer color and shall revise whichever is incorrect.
- 3. Applicant shall indicate on a site plan exhibit the number of fixtures per DU, as well as each fixture model.
- 4. Applicant shall clarify if any outdoor soffit lighting is proposed.
- 5. If field edits during construction necessitate changes to the approved Landscaping Plan dated May 26, 2023, such amendments shall be reviewed by the Community Development Director to ensure compliance with the applicable landscaping regulations.
- 6. Any disturbed areas on the site shall be revegetated with the seed mix recommended by the Grand County Natural Resource Conservation Service, which mix composition is described in Section 7.4 of the Standards and Specifications for Design and Construction.
- 7. Dimensions of snow storage areas shall be indicated on the Site Plan exhibits.
- 8. Should the Town Engineer have comments, Applicant shall revise Grading and Drainage Plan accordingly.
- 9. Approved drainage and erosion control shall be in place prior to and throughout site preparation and construction and through successful revegetation.
- 10. Applicant shall submit an Administrative Variance Request for the Town Engineer's review as seen in the Standards, Section 8.1, Variances.
- 11. A stabilized construction entrance shall be installed prior to ground disturbance.
- 12. All fixtures shall comply with the 850-lumen limit as the Lithonia DSXW1 fixture has 5,752 lumens.
- 13. Applicant shall provide a physical materials board depicting the proposed colors and materials for the board and batten, stone, and garage doors.



14. Applicant shall clarify the proposed color and material schemes for these building model types so that there are no discrepancies between submittal documents.

Staff recommends the Planning Commission approve the Minor Site Plan – 12, 16, 20, 24, 28, 30, 34, and 38 Wheeler Road (Building 1) and 52, 56, 60, 62, 66, and 70 Wheeler Road (Building 2) – Sojourn at Idlewild Subdivision (PLN24-012 and PLN24-013) with the following conditions:

- 1. Applicant shall indicate exterior color schemes for the buildings.
- 2. Applicant shall revise outdoor lighting so all fixtures comply with the 850 lumen limit per fixture.
- 3. Applicant shall revise photometric plan to reflect the new fixtures.
- 4. Applicant shall revise Outdoor Lighting Tabulation on Minor Site Plan Application Form to reflect the new fixtures.
- 5. The unscreened gas and electric meters on both sides of the buildings which are visible from public view shall be screened in accordance with § 2-B-4(D), Mechanical Equipment and Meters.
- 6. If field edits during construction necessitate changes to the approved Landscaping Plan dated May 26, 2023, such amendments shall be reviewed by the Community Development Director to ensure compliance with the applicable landscaping regulations.
- 7. Any disturbed areas on the site shall be revegetated with the seed mix recommended by the Grand County Natural Resource Conservation Service, which mix composition is described in Section 7.4 of the Standards and Specifications for Design and Construction.
- 8. Should the Town Engineer have comments, Applicant shall revise Grading and Drainage Plan accordingly.
- 9. Approved drainage and erosion control shall be in place prior to and throughout site preparation and construction and through successful revegetation.
- 10. The Town Engineer shall review the Administrative Variance Requests to exceed maximum driveway slopes in accordance with the Standards, Section 8.1, Variances.
- 11. A stabilized construction entrance shall be installed prior to ground disturbance.

Required Permits:

- ✓ Building Permit
- ✓ Driveway Permit
- ✓ SFD/Duplex Deposit Agreement

Date: February13, 2024

Dear James, Hugh and Sheila,

We are submitting for this Minor Site Plan review for row home building #1 within the Sojourn at Idlewild development. This is building 1 as shown on our site plans as were submitted through the Preliminary and Final platting processes. We anticipate construction start on this row home building this summer. While we are submitting for the first three buildings within the development at this time the materials and color scheme as represented within this submittal will be consistent throughout the project. This row home building including unit plans, elevations, etc. are essentially the same as all row home buildings on the uphill side of the streets, this includes buildings, 1,2,3,5,7,9,17,19&21 as can be seen in the site plan submitted for Final Plat. Let me know if you have any questions or if any additional information is needed.

Project Name: Sojourn at Idlewild

<u>Street Address:</u> T.B.D. refer to plat for additional information.

Owner Contact Information: Paul Malone Highland Development Company 2100 Downing Street, Denver, CO 80205 pmalone@highlanddevelopmentco.com 303.926.4949 Office 303.500.4380 Cell

Architect Contact Information:

Ryan Hanneman RHAP Architecture + Planning 1301 Walnut Street, Suite 101, Boulder, CO 80302 ryan@rhaparch.com 303.993.6277 Office 720.985.9527 Cell

<u>Civil Engineer Contact Information:</u> Tony Krempin TKE Civil & Structural Engineering 998 County Road 553, Granby, CO 80446 tony@tkcse.com 970.281.5280

Surveyor Contact Information: Dave Berglund Core Consultants, Inc. 3473 South Broadway, Englewood, CO 80113 303.703.4444 Office 970.590.8666 Cell

Legal Description:

SOJOURN AT IDLEWILD

A REPLAT OF TRACTS F-2 AND F-3, REPLAT OF TRACT F, RIVER WALK AT WINTER PARK FILING NO. 1-EXEMPTION PLAT A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 1 SOUTH, RANGE 75 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF WINTER PARK, COUNTY OF GRAND, STATE OF COLORADO

Zoning District: P-D

Lot Size: Refer to plat for lots 1-8 at Building #1

<u>Proposed Use:</u> Attached single family residential

Number of Dwelling Units: 8

Number of Bedrooms per Dwelling Unit: 3

<u>Approximate Construction Schedule:</u> Break ground in summer 2024, building completion in late 2025 / early 2026

Sincerely, RHAP Architecture and Planning

Ryan Hanneman, Principal

Date: February13, 2024

Dear James, Hugh and Sheila,

We are submitting for this Minor Site Plan review for row home building #2 within the Sojourn at Idlewild development. This is building 2 as shown on our site plans as were submitted through the Preliminary and Final platting processes. We anticipate construction start on this row home building this summer. While we are submitting for the first three buildings within the development at this time the materials and color scheme as represented within this submittal will be consistent throughout the project. This row home building including unit plans, elevations, etc. are essentially the same as all row home buildings on the uphill side of the streets, this includes buildings, 1,2,3,5,7,9,17,19&21 as can be seen in the site plan submitted for Final Plat. Let me know if you have any questions or if any additional information is needed.

Project Name: Sojourn at Idlewild

<u>Street Address:</u> T.B.D. refer to plat for additional information.

Owner Contact Information: Paul Malone Highland Development Company 2100 Downing Street, Denver, CO 80205 pmalone@highlanddevelopmentco.com 303.926.4949 Office 303.500.4380 Cell

Architect Contact Information:

Ryan Hanneman RHAP Architecture + Planning 1301 Walnut Street, Suite 101, Boulder, CO 80302 ryan@rhaparch.com 303.993.6277 Office 720.985.9527 Cell

<u>Civil Engineer Contact Information:</u> Tony Krempin TKE Civil & Structural Engineering 998 County Road 553, Granby, CO 80446 tony@tkcse.com 970.281.5280

Surveyor Contact Information: Dave Berglund Core Consultants, Inc. 3473 South Broadway, Englewood, CO 80113 303.703.4444 Office 970.590.8666 Cell

Legal Description:

SOJOURN AT IDLEWILD

A REPLAT OF TRACTS F-2 AND F-3, REPLAT OF TRACT F, RIVER WALK AT WINTER PARK FILING NO. 1-EXEMPTION PLAT A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 1 SOUTH, RANGE 75 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF WINTER PARK, COUNTY OF GRAND, STATE OF COLORADO

Zoning District: P-D

Lot Size: Refer to plat for lots 9-14 at Building #2

<u>Proposed Use:</u> Attached single family residential

Number of Dwelling Units: 6

Number of Bedrooms per Dwelling Unit: 3

Approximate Construction Schedule: Break ground in summer 2024, building completion in late 2025 / early 2026

Sincerely, RHAP Architecture and Planning

Ryan Hanneman, Principal

Bufferyard Tabulation

Tabulation of required bufferyard types per property line and list of proposed plantings proposed per property line. See Sec. 3-I-5, *Bufferyards,* for requirements.

NOT APPLICABLE ON THIS JOB. THIS PROJECT'S LANDSCAPE IS BASED ON LANDSCAPE PLANS APPROVED DURING PLAT PROCESS.	Evergreen Trees Required	Evergreen Trees Provided	Deciduous Trees Required	Deciduous Trees Provided	Shrubs Required	Shrubs Provided	Berm Height	Deficiency (if any)
N Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								
S Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								
E Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								
W Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								

Outdoor Lighting Tabulation ROW HOME BUILDING 1 See Article 3.K, *Outdoor Lighting*, for requirements. Ensure each fixture's cut sheet contains the International Dark Sky Association (IDA) Approval Symbol

Fixture Name	Proposed # of Fixtures	Proposed Lumens per Fixture	Proposed Correlated Color Temperature (in degrees Kelvin)
Lithonia Lighting ARC1LED-P1-30K-MVOLT	2	1500 LM	3000K
Kichler Lighting 9234BK	24	800 LM	3000K
Lithonia Lighting DSXW1 LED 20C 1000 30K TFTM MVOLT HS	1	5752 LM	3000K

2 Process for Approval – See Sec. 5-E-1, Site Plan.

3 Fees - See Sec. 5-B-6, Application Fees. An invoice will be sent once the planning file has been created.

A. \$100.00 Minor Site Plan Application Review Fee.

- B. \$3,000.00 Deposit for Building Exterior, Driveway, and Landscaping.
- C. \$50.00 Driveway Permit Application Fee.

4 Applicant's Certification Statement

1, 1/19

_, as Applicant and duly representative of the owner,

hereby certify that the information included upon the attached submittal items are true and accurate; and that the development of the site will occur in accordance with the submittal items.

Bufferyard Tabulation

Tabulation of required bufferyard types per property line and list of proposed plantings proposed per property line. See Sec. 3-I-5, *Bufferyards,* for requirements.

NOT APPLICABLE ON THIS JOB. THIS PROJECT'S LANDSCAPE IS BASED ON LANDSCAPE PLANS APPROVED DURING PLAT PROCESS.	Evergreen Trees Required	Evergreen Trees Provided	Deciduous Trees Required	Deciduous Trees Provided	Shrubs Required	Shrubs Provided	Berm Height	Deficiency (if any)
N Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								
S Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								
E Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								
W Boundary								
Length: linear feet								
Adjacent properties are zoned:								
Bufferyard Type: A B C D (circle one)								

Association (IDA) Approval Symbol. Fixture Name	Proposed # of Fixtures	Proposed Lumens per Fixture	Proposed Correlated Color Temperature (in degrees Kelvin)
Kichler Lighting 9234BK	18	800 LM	3000K
Lithonia Lighting DSXW1 LED 20C 1000 30K TFTM MVOLT HS	2	5752 LM	3000K

2 Process for Approval – See Sec. 5-E-1, Site Plan.

3 Fees - See Sec. 5-B-6, Application Fees. An invoice will be sent once the planning file has been created.

A. \$100.00 Minor Site Plan Application Review Fee.

- B. \$3,000.00 Deposit for Building Exterior, Driveway, and Landscaping.
- C. \$50.00 Driveway Permit Application Fee.

4 Applicant's Certification Statement

1, 1/19

_, as Applicant and duly representative of the owner,

hereby certify that the information included upon the attached submittal items are true and accurate; and that the development of the site will occur in accordance with the submittal items.





ID	ITEM	MATERIAL	COLOR
Α	LP SMARTSIDE REVERSED BOARD & BATTEN - PRIMARY WALL MATERIAL	ENGINEERED WOOD	BENJAMIN MOORE SOLID BEDFORD BLUE 1679
В	STONE - SECONDARY WALL MATERIAL	LIMESTONE	GREY
С	POST	CEDAR TIMBER	PAINTED <u>BLACK</u>
D	DECK	CAPPED WOOD COMPOSITE DECKING	SANDSTONE
E	PRIMARY ROOF	FIBERGLASS ASPHALT SHINGLES	SLATELINE ANTIQUE SLATE - DARK GRAY
F	FASCIA - LP SMARTSIDE TRIM	ENGINEERED WOOD	BENJAMINMOORE SOLID BLACK HC-190
G	WINDOWS	FIBERGLASS	<u>BLACK</u>
Н	FRONT DOOR	FIBERGLASS	<u>BLACK</u>
I	GARAGE DOOR	METAL	BLACK
J	RAILINGS	METAL	BLACK

BUILDING MATERIALS BOARD



1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

BUILDING No.

МШ,

HO

ROW



CO 80482 N AT IDLEWILD , WINTER PARK, (JOURN ROAD, V SKI IDLEWILD F



A0.1 MATERIAL BOARD 03/05/2024





ID	ITEM	MATERIAL	COLOR
Α	LP SMARTSIDE REVERSED BOARD & BATTEN - PRIMARY WALL MATERIAL	ENGINEERED WOOD	BENJAMIN MOORE SOLID MIDDLEBURRY BROWN HC-68
В	STONE - SECONDARY WALL MATERIAL	LIMESTONE	NATURAL GREY
С	POST	CEDAR TIMBER	PAINTED <u>BLACK</u>
D	DECK	CAPPED WOOD COMPOSITE DECKING	SANDSTONE
E	PRIMARY ROOF	FIBERGLASS ASPHALT SHINGLES	SLATELINE ANTIQUE SLATE - DARK GRAY
F	FASCIA - LP SMARTSIDE TRIM	ENGINEERED WOOD	BENJAMINMOORE SOLID BLACK HC-190
G	WINDOWS	FIBERGLASS	BLACK
Н	FRONT DOOR	FIBERGLASS	BLACK
I	GARAGE DOOR	METAL	BLACK
J	RAILINGS	METAL	BLACK

BUILDING MATERIALS BOARD



1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901



















BUILDING No , М Ш ROW HO



F	G		F			F		
)			03)			3	
	E					EXTERIOR FIXTURE, T	LIGHTING YP. E	
(121)		- -	(121			EXTERIOR FIXTURE, 121	LIGHTING TYP.	













- SCUPPER, TYP.





1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

- LP SMARTSIDE REVERSED BOARD & BATTEN VERTICAL SIDING

ELEVATION NOTES

-WINDOW HEAD HEIGHTS ARE DIMENSIONED ON ELEVATIONS FROM T.O. SUBFLOOR AT RESPECTED UNIT

-ALL WINDOW TRIM TO BE 1"x4" TEXTURED CEMENT BOARD UNLESS OTHERWISE NOTED.

-ALL ROOF FASCIA BOARDS TO BE 5/4"x8" CEMENT BOARD UNLESS OTHERWISE NOTED.

-ALL GUTTERS TO BE 5"x5" METAL GUTTERS UNLESS OTHERWISE NOTED.

-1"x4" TEXTURED CEMENT BOARD TRIM TYPICAL AT ALL GARAGE DOORS UNLESS OTHERWISE NOTED.

-ASHPALT SHINGLE ROOF TYPICAL AT ALL ROOFS UNLESS OTHERWISE NOTED.

80482 No. 0 C N AT IDLEWILD WINTER PARK, BUILDING SKI IDLEWILD ROAD, Ш Д **HO** ROW



A2.2

ELEVATIONS 02/13/2024









SKI IDLEWILD ROAD,

F

Ш Х

P

ROW

REVISIONS

A2.3

ELEVATIONS

02/13/2024

No. Description Date













G

E











ELEVATION NOTES

-WINDOW HEAD HEIGHTS ARE DIMENSIONED ON ELEVATIONS FROM T.O. SUBFLOOR AT RESPECTED

-ALL ROOF FASCIA BOARDS TO BE 5/4"x8" CEMENT BOARD UNLESS OTHERWISE NOTED.

-1"x4" TEXTURED CEMENT BOARD TRIM TYPICAL AT ALL GARAGE DOORS UNLESS OTHERWISE

-ASHPALT SHINGLE ROOF TYPICAL AT ALL ROOFS

0' 2' 4'

N 0 Z BUILDING F Ш Z **OH** ROW







16'





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A1.0	OVERALL FLOOR PLANS
A1.1	LEVEL 1A FLOOR PLAN
A1.2	LEVEL 1B FLOOR PLAN
A1.3	LEVEL 2A FLOOR PLAN
A1.4	LEVEL 2B FLOOR PLANS
A1.5	LEVEL 3A FLOOR PLAN
A1.6	LEVEL 3B FLOOR PLAN
A1.7	ROOF PLAN
A1.8	ROOF PLAN
A2.1	ELEVATIONS
A2.2	ELEVATIONS
A2.3	ELEVATIONS

APPLICABLE CODES

TOWN OF WINTER PARK: PUD

BUILDING TYPE: IRC TOWNHOUSE

BUILDING CODE: 2015 INTERNATIONAL RESIDENTIAL CODE 2015 INTERNATIONAL MECHANICAL CODE 2015 INTERNATIONAL PLUMBING CODE 2015 INTERNATIONAL FUEL GAS CODE 2015 INTERNATIONAL ENERGY CONSERVATION CODE 2015 INTERNATIONAL FIRE CODE 2017 NATIONAL ELECTRICAL CODE ICC A117.1-2017

ROW HOM	E, BUILDING No. 1	architecture + plar	P
		1301 Walnut Stree Suite 101 Boulder, CO 8030 720-530-5901	et,)2
		L. S. C.	K, CO 80482
PROJECT DIRECTORY	VICINITY MAP		PAR
HIGHLAND DEVELOPMENT COMPANY 2100 DOWNING ST. DENVER, CO 80205 P. 720.739.7200 ARCHITECT RHAP ARCHITECTURE + PLANNING 1301 WALNUT STREET, SUITE 101 BOULDER, CO 80302 P. 720.985.9527 RYAN HANNEMAN CIVIL ENGINEER TKE CIVIL & STRUCTURAL ENGINEERING P.O. BOX 2225 GRANBY, CO 80446 P. 970.725.3310 STRUCTURAL ENGINEER FORTIS STRUCTURAL, LLC 7935 E. PRENTICE AVE. SUITE 305 GREENWOOD VILLAGE, CO 80111 P. 720.593.3800 PAUL A. ESPINOZA SURVEYOR CORE CONSULTANTS, INC. 3473 SOUTH BROADWAY ENGLEWOOD, CO 80113 P. 303.703.4444 GEOTECH A.G. WASSENAAR, INC. 3211 SOUTH ZUNI STREET ENGLEWOOD, CO 80110 P. 303.759.8100	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	ROW HOME, BUILE SOJOURN AT IDLE	SKI IDLEWILD ROAD, WINTER
LANDSCAPE OXBOW DESIGN COLLABORATIVE, LTD. 802 E. 19TH AVE. UNIT A DENVER, CO 80218 DAVID G. GREGORY	BUNIT TYPE LEVEL 3 = 630 SF LEVEL 2 = 649 SF LEVEL 1 = 396 SF TOTAL = 1,675 SF LEGAL DESCRIPTION	REVISIONS No. Description Date - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	te
2015 IECC STANDARDS, (REFER TO RESCHECK):FENESTRATION U-FACTOR:0.29SKYLIGHT U-FACTOR:N/AGLAZED FENESTRATION SHGC:NRCEILING R-VALUE:49WOOD FRAME R-VALUE:21FLOOR R-VALUE:38BASEMENT WALL R-VALUE:15/19SLAB R-VALUE AND DEPTH:10, 4 ft**	SOJOURN AT IDLE WILD A REPLAT OF TRACTS F-2 AND F-3, REPLAT OF TRACT F, RIVER WALK AT WINTER PARK FILING NO.1-EXEMPTION PLAT A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 1 SOUTH, RANGE 75 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF WINTER PARK, COUNTY OF GRAND, STATE OF COLORADO	A0.0 COVER SHI	 EE1
CRAWL SPACE WALL R-VALUE 15/19 ** R-15 REQUIRED FOR HEATED SLABS, NA		02/13/2024	1

ADDRESSING DIAGRAM 2 A0.0 1" = 20'-0"

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PROJECT DIRECTORY

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	SHEET LIST
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A1.3	FLOOR PLANS
A1.4	ROOF PLAN
A2.1	ELEVATIONS
A2.2	ELEVATIONS
A2.3	ELEVATIONS

APPLICABLE CODES

GRAND COUNTY ZONE DISTRICT: R-C BUILDING TYPE: IRC TOWNHOUSE

BUILDING CODE: 2015 INTERNATIONAL RESIDENTIAL CODE 2015 INTERNATIONAL MECHANICAL CODE 2015 INTERNATIONAL PLUMBING CODE 2015 INTERNATIONAL FUEL GAS CODE 2015 INTERNATIONAL ENERGY CONSERVATION CODE 2015 INTERNATIONAL FIRE CODE 2017 NATIONAL ELECTRICAL CODE ICC A117.1-2017

OWNER

ARCHITECT RHAP ARCHITECTURE + PLANNING 1301 WALNUT STREET, SUITE 101 BOULDER, CO 80302 P. 720.985.9527 **RYAN HANNEMAN**

CIVIL ENGINEER TKE CIVIL & STRUCTURAL ENGINEERING P.O. BOX 2225 GRANBY, CO 80446 P. 970.725.3310

STRUCTURAL ENGINEER

FORTIS STRUCTURAL, LLC 7935 E. PRENTICE AVE. SUITE 305 GREENWOOD VILLAGE, CO 80111 P. 720.593.3800 PAUL A. ESPINOZA

SURVEYOR

CORE CONSULTANTS, INC. 3473 SOUTH BROADWAY ENGLEWOOD, CO 80113 P. 303.703.4444

GEOTECH A.G. WASSENAAR, INC. 3211 SOUTH ZUNI STREET ENGLEWOOD, CO 80110 P. 303.759.8100

LANDSCAPE OXBOW DESIGN COLLABORATIVE, LTD. 802 E. 19TH AVE. UNIT A DENVER, CO 80218 DAVID G. GREGORY

2015 IECC STANDARDS:	
FENESTRATION U-FACTOR:	0.32
SKYLIGHT U-FACTOR:	0.55
GLAZED FENESTRATION SHGC:	NR
CEILING R-VALUE:	49
WOOD FRAME R-VALUE:	24*
MASS WALL R-VALUE:	19/21
FLOOR R-VALUE:	38
BASEMENT WALL R-VALUE:	15/19
SLAB R-VALUE AND DEPTH:	10, 4 ft**
CRAWL SPACE WALL R-VALUE	15/19
* PER GRAND COUNTY AMENDME	INTS
** R-15 REQUIRED FOR HEATED S	SLABS



 $\left(\begin{array}{c} \end{array} \right)$

CONDITIONED FLOOR AREA SUMMARY (PER UNIT): UNCONDITIONED FLOOR AREA SUMMARY (PER UNIT): **B UNIT TYPE B UNIT TYPE** = 630 SF LEVEL 3 GARAGE = 232 SF = 649 SF LEVEL 2 <u>LEVEL 1</u> TOTAL = 396 SF = 1,675 SF **B-1 UNIT TYPE B-1 UNIT TYPE** = 630 SF GARAGE = 232 SF LEVEL 3 LEVEL 2 = 649 SF <u>LEVEL 1</u> TOTAL = 414 SF = 1,693 SF **B-2 UNIT TYPE B-2 UNIT TYPE** = 630 SF = 243 SF LEVEL 3 GARAGE LEVEL 2 = 649 SF <u>LEVEL 1</u> TOTAL = 402 SF = 1,681 SF

LEGAL DESCRIPTION

SOJOURN AT IDLE WILD

A REPLAT OF TRACTS F-2 AND F-3, REPLAT OF TRACT F, RIVER WALK AT WINTER PARK FILING NO.1-EXEMPTION PLAT A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 1 SOUTH, RANGE 75 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TOWN OF WINTER PARK, COUNTY OF GRAND, STATE OF COLORADO

	REVISIO	NS
No.	Description	Date
+		
_		

COVER SHEET 02/13/2024







1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

 $\overline{}$ No. N AT IDLEWILD , WINTER PARK, 6 BUILDING SKI IDLEWILD ROAD, Ш М **OH** ROW

80482

CO



0' 4' 8'

16'

32'









1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

SKI IDLEWILD ROAD WINTER PARK GRAND COUNTY, CO, 80482

BUILDING No Я Ш ROW HO

N



52.32° +

32'







NOTE: REFER TO LANDSCAPE PLAN FOR REVEGETATION. SURFACE WATER SHALL DRAIN AWAY FROM THE HOUSE AT ALL POINTS.



ELECTRIC LINE
GAS LINE
WATER LINE
SEWER LINE
R UNDERGROUND UTILITIE LINES INCLUDING ES, ELECTRIC LINES, TELECOM CONDUIT



80482 **N** 0 \mathbf{O} NAT IDLEWILD WINTER PARK, DING BUIL JOURN ROAD, \ Ш Z SKI IDLEWILD F ROW

F

DH

architecture + planning

1301 Walnut Street,

Suite 101

Boulder, CO 80302

720-530-5901



SITE PLAN 02/13/2024



NOTE: REFER TO LANDSCAPE PLAN FOR REVEGETATION. SURFACE WATER SHALL DRAIN AWAY FROM THE HOUSE AT ALL POINTS.



SYMBOL	
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—U/G—U/G—U/G—	TRENCH FO GAS LIN
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SITE PLAN NOTES





1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

N DING BUIL Ш Z **P** ROW

N

WINTER PARK , CO, 80482 D ROAD MILD MD CC SKI IDLEV GRAN



SITE PLAN 02/13/2024

PLANTING NOTES:

- . ALL PLANT MATERIALS SHALL MEET OR EXCEED SIZE IN SCHEDULES. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REFUSE PLANT MATERIALS WHICH DO NOT MEET THE QUALITY REQUIRED FOR THE PROJECT. ALL DECIDUOUS TREES SHALL HAVE FULL, WELL SHAPED HEADS, ALL EVERGREEN TREES SHALL BE UNSHEARED AND FULL TO THE GROUND. PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1
- 2. SEE PLANTING DETAILS FOR PLANT PIT DIMENSIONS, BACKFILL REQUIREMENTS, AND INSTALLATION NOTES. ALL TREES TO BE STAKED OR GUYED PER DETAILS ON SHEET L2.1.
- 3. ALL PLANTS WILL BE INSPECTED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE DELIVERY TO THE SITE. ALL TREE LOCATIONS AND EDGES OF NEW PLANTING BEDS ARE TO BE STAKED FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 4. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS.
- 5. LANDSCAPE CONTRACTOR SHALL PROVIDE PER-UNIT COSTS FOR EVERY SIZE OF PLANT MATERIALS, AND BY TYPE AS CALLED OUT ON PLANS. UNIT COSTS TO INCLUDE THE PLANT MATERIAL ITSELF AND INSTALLATION, INCLUDING ALL LABOR, AMENDMENTS, FERTILIZERS, ETC. AS DETAILED AND SPECIFIED FOR EACH SIZE.
- 6. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO DO THEIR OWN QUANTITY TAKEOFFS FOR ALL PLANT MATERIALS AND SIZES SHOWN ON PLANS.
- 7. COORDINATE INSTALLATION OF LARGE PLANT MATERIAL WITH FOOTINGS AND PAVEMENTS. ANY DAMAGE TO IMPROVEMENTS BY OTHERS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- 8. THE LANDSCAPE CONTRACTOR SHALL ALLOW FOR THE ADDITION OF SPECIFIED QUANTITIES OF SOIL AMENDMENTS, CONDITIONERS AND MULCH IN SOIL PREPARATION AND FINISH GRADING.
- IMPORTED SOIL SHALL BE USED TO SUPPLEMENT EXISTING SOIL AS NECESSARY TO MEET THE FINISHED GRADING REQUIREMENTS OF PLANTING AREAS.
- 10. THE LANDSCAPE CONTRACTOR SHALL PERFORM A STANDARD AGRICULTURAL SUITABILITY ANALYSIS OF EXISTING SOIL PROPOSED FOR PLANTING AT HIS EXPENSE AND INCORPORATE RECOMMENDATIONS PER DENVER WATER AMENDMENT REQUIREMENTS PRIOR TO PLANTING.
- 11. INSTALL A MINIMUM OF 4 CUBIC YARDS OF SOIL AMENDMENT PER 1000 SQUARE FEET OF PERMEABLE AREA TO BE PLANTED WITH SOD, SHRUBS, GRASSES, OR PERENNIALS, AMENDMENT SUPPLIER SHALL BE A1 ORGANICS OF EATON, COLORADO.
- 12. ALL TREES, SHRUBS, PERENNIALS, SOD AND SEEDED AREAS SHALL BE GUARANTEED TO REMAIN ALIVE AND HEALTHY FOR A 12-MONTH PERIOD AFTER INITIAL ACCEPTANCE. REPLACEMENTS SHALL BE GUARANTEED AN ADDITIONAL 12-MONTHS UNTIL FINAL ACCEPTANCE. ALL REPLACEMENT COSTS SHALL BE BORN BY THE CONTRACTOR.
- 13. TAKE ALL DIMENSIONS PERPENDICULAR TO ANY REFERENCE LINE, CENTERLINE, OR BACK OF CURB.
- 14. STREET TREES SHALL BE PLACED 5'-0" MIN. FROM BURIED UTILITIES.
- 15. ALL PROPOSED LANDSCAPING IN THE RIGHT-OF-WAY SHALL BE PER THE TOWN OF WINTER PARK REQUIREMENTS AND TREES TO BE IN ACCORDANCE WITH CURRENT APPROVED TOWN STANDARDS INCLUDING SPECIES. INSTALLATION OF TREES IN THE RIGHT-OF-WAY TO BE PER TOWN STANDARDS PLANTING DETAIL. SEE SHEET L2.1
- 16. TREES IN THE RIGHT-OF-WAY TO MAINTAIN A MINIMUM DISTANCE FROM THE FOLLOWING UTILITIES/ELEMENTS:

10' DRIVEWAYS	20' STOP SIGNS
10' FIRE HYDRANTS	5' STORM INLET
20' LIGHT POLES	5' WATER METERS

- 17. TREES PLANTING SETBACKS FROM PAVING AREAS TO BE PER TOWN OF WINTER PARK LANDSCAPE DESIGN **REGULATIONS & GUIDELINES:**
 - EVERGREEN TREES: 10' DECIDUOUS TREES: 5'
- 18. TREE WRAPPING MATERIAL SHALL BE FOUR INCHES WIDE, BITUMINOUS IMPREGNATED TAPE, CORRUGATED OR CREPE PAPER, BROWN IN COLOR, SPECIFICALLY MANUFACTURED FOR TREE WRAPPING. TREES SHALL BE WRAPPED BETWEEN OCTOBER 15 AND NOVEMBER 1 OF THE YEAR THEY ARE PLANTED. NO TREE WRAPPING SHALL BE PERMITTED UNTIL A LICENSED LANDSCAPE CONTRACTOR OR CERTIFIED ARBORIST HAS INSPECTED THE TREE. IT IS THE DUTY OF THE CONTRACTOR TO WRAP DECIDUOUS TREES DURING THE ONE-YEAR WARRANTY PERIOD.
- 19. WINTER WATERING SHALL BE AT THE EXPENSE OF THE CONTRACTOR UNTIL SUCH TIME AS FINAL ACCEPTANCE IS RECEIVED.
- 20. LANDSCAPING IS TO MAINTAIN THREE (3) FEET OF CLEARANCE ON THE SIDES AND BACK, AND TEN (10) FEET OF CLEARANCE IN THE FRONT OF ELECTRICAL EQUIPMENT (TRANSFORMERS/SWITCHES/VAULTS). IN ADDITION, ANY DEEP ROOTED TREES MUST MAINTAIN THREE (3) FEET OF CLEARANCE FROM UNDERGROUND INFRASTRUCTURE (CABLES/CONDUITS). LOCATION OF LANDSCAPE MATERIAL MAY BE ALTERED TO PROVIDE ADEQUATE CLEARANCE FROM THE FINAL LOCATION OF THE ELECTRIC DISTRIBUTION FACILITIES TO THE SATISFACTION OF THE ELECTRICAL UTILITY PROVIDER.

LANDSCAPE REQUIREMENT CALCULATIONS:

TOTAL	TREES	TREES	SHRUBS	SHRUBS		
LANDSCAPE AREA	REQUIRED	PROVIDED	REQUIRED	PROVIDED		
169,595	113	134	565	612		INAN
	1	1	1	1	1	B (4

LANDSCAPE AREA CONSISTS OF ALL LAND OUTSIDE LANDSCAPE TRANSITION ZONES (LTZ) DISTURBED FOR CONSTRUCTION BUT NOT COVERED BY BUILDINGS, RECREATION STRUCTURES, PARKING, DRIVEWAYS, AND ROADS.

FOR AREAS WITHIN 75 FEET OF BUILDINGS, RECREATION STRUCTURES, PARKING LOTS, DRIVEWAYS, AND ROADS SHALL PROVIDE (1) TREE AND (5) SHRUBS PER 1,500 SF OF LANDSCAPE AREA.

FOR AREAS OUTSIDE 75 FEET OF BUILDINGS. RECREATIONS STRUCTURES. PARKING LOTS, DRIVEWAYS, AND ROADS SHALL PROVIDE (1) TREE AND (5) SHRUBS PER 3,000 SF OF LANDSCAPE AREA.

LANDSCAPE TRANSITION ZONE	TOTAL LENGTH (LF)	deciduous trees provided	EVERGREEN TREES PROVIDED	SH PR(
B (40' WIDTH)	*2,955	126	84	
C (40' WIDTH)	**1,073	61	35	
D (120' WIDTH)	***65	7	8	

LTZ - B, IS MEASURED AS THE LENGTH OF PROPERTY LINE ALONG PLANNED DEVELOPED LOTS, MINUS LENGTH OF INTERSECTING R.O.W. ** LTZ - C, IS MEASURED AS THE LENGTH OF COLLECTOR STREET R.O.W. WITHIN THE

PROPERTY BOUNDARY, MINUS THE LENGTH OF DRIVE LANES.

*** LTZ - D. IS MEASURED AS THE LENGTH OF THE PROPERTY LINE ALONG PLANNED DEVELOPED LOTS. MINUS LENGTH OF INTERSECTING B.O.W.

GENERAL NOTES:

- THAT ARE FOUND.
- WITH APPROVED DRAWINGS.

- CONSTRUCTION.
- ORDINANCES.

- REQUIRED.
- SANDSTONE BOULDERS (ETC).

IRRIGATION NOTES:

MAINTENANCE NOTES:

FINAL COMPLETION.

THE BASE INFORMATION PROVIDED BY ENGINEER. REFER TO SURVEY, PLAT, ROADWAY AND UTILITY DRAWINGS AND OTHER AVAILABLE DOCUMENTS FOR PROPERTY LIMITS, EXISTING CONDITIONS, AND HORIZONTAL AND VERTICAL CONTROL. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL MATERIAL LOCATIONS AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES

2. THE LANDSCAPE CONTRACTOR SHALL HAVE ONE (1) APPROVED COPY OF PLANS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES. THOROUGHLY REVIEW THE SITE CONDITIONS, DRAWINGS, AND TECHNICAL SPECIFICATIONS PRIOR TO CONSTRUCTION. COMPLETE THE WORK OF THIS PROJECT IN ACCORDANCE

ANYTHING MENTIONED IN THE TECHNICAL SPECIFICATIONS AND NOT SHOWN ON THE DRAWINGS, OR SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE TECHNICAL SPECIFICATIONS SHALL NOT BE OF LIKE EFFECT AS IF SHOWN ON OR MENTIONED IN BOTH.

4. NOTES AND DETAILS ON SPECIFIC DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND SPECIFIC DETAILS. REFERENCE TO NORTH REFERS TO TRUE NORTH. REFERENCE TO SCALE IS FOR FULL SIZED DRAWINGS ONLY. DO NOT SCALE FROM DRAWINGS.

THE CONTRACTOR IS ADVISED THAT ALL EXISTING TREES AND SHRUBS ARE TO REMAIN UNLESS SPECIFICALLY NOTED TO BE REMOVED IN THE PLANS. CARE SHALL BE TAKEN TO PROTECT ALL TREES AND SHRUBS FROM DAMAGE DURING CONSTRUCTION. ALL DAMAGES CAUSED BY THE CONTRACTOR S SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL CONSTRUCTION BARRICADES. SIGNS. AND WARNING DEVICES NECESSARY DURING CONSTRUCTION.

LANDSCAPE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON SITE AT ALL TIMES DURING

LANDSCAPE CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES AND

LANDSCAPE CONTRACTOR SHALL COORDINATE AND OBTAIN ALL NECESSARY PERMITS TO PERFORM ALL PROPOSED WORK AND SHALL COMPLY WITH ALL NOTIFICATION AND INSPECTION REQUIREMENTS.

10. LANDSCAPE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND NOTIFY THE GENERAL CONTRACTOR IN WRITING OF UNSATISFACTORY CONDITIONS. DO NOT PROCEED UNTIL CONDITIONS HAVE BEEN CORRECTED.

11. BEFORE COMMENCING WORK. CONTACT APPROPRIATE UTILITY COMPANIES FOR UTILITY LOCATIONS. AND COORDINATE WITH THE GENERAL CONTRACTOR IN REGARD TO LOCATION OF PROPOSED UTILITIES, IRRIGATION SLEEVES, CONDUITS, (ETC). LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MODIFICATIONS OR DAMAGES TO THE UTILITY LINES, STRUCTURES OR INJURIES THEREFROM. FOR EXISTING UTILITY INFORMATION CONTACT "THE UTILITY NOTIFICATION CENTER OF COLORADO" AT 1-800-922-1987. A MINIMUM OF THREE (3) BUSINESS DAY NOTICE IN ADVANCE OF LOCATIONS NEEDED ARE

12. LANDSCAPE CONTRACTOR TO SUBMIT SAMPLES OF MISCELLANEOUS LANDSCAPE & HARDSCAPE MATERIALS TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION, IE.; MULCH, EDGER

13. ALL MATERIAL AND WORKMANSHIP SHALL BE GUARANTEED AND MAINTAINED FOR ONE YEAR FROM THE DATE OF INITIAL ACCEPTANCE. ALL REPLACEMENT COSTS SHALL BE BORNE BY THE CONTRACTOR.

14. ALL LANDSCAPE CONSTRUCTION PRACTICES, WORKMANSHIP, AND ETHICS SHALL, BE IN ACCORDANCE WITH INDUSTRY STANDARDS SET FORTH IN THE CONSTRUCTION HANDBOOK PUBLISHED BY THE COLORADO LANDSCAPE CONTRACTOR'S ASSOCIATION.

1. ALL LANDSCAPED AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM. SHRUBS WILL BE DRIP IRRIGATED. PROVIDE (3) QUICK COUPLERS AROUND THE PERIMETER OF THE PLAYGROUND. CONTRACTOR SHALL BE RESPONSIBLE FOR TAPS, BACKFLOW PREVENTION AND WINTERIZATION SYSTEMS SLEEVING UNDER PAVED AREAS, WALLS, AND ALL SPRINKLER COMPONENTS NECESSARY FOR A FULLY FUNCTIONAL SYSTEM. TREES SHALL BE ON A SEPARATE ZONE FROM SHRUBS. DESIGN/BUILD DRAWINGS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.

2. ELECTRIC SERVICES FOR THE IRRIGATION CONTROLLERS ARE INSTALLED, OWNED AND MAINTAINED BY THE OWNER OR LEGAL ENTITY CREATED FOR COMMON AREA MAINTENANCE.

3. THE IRRIGATION CONTROLLER'S METERED ELECTRIC SERVICE MUST BE BUILT TO THE NATIONAL ELECTRIC CODE (NEC), REQUIRE A BUILDING PERMIT AND A ONE-LINE DIAGRAM. THE ONE-LINE DIAGRAM MUST BE SHOWN AS COLD SEQUENCED AND LABELED WITH THE SERVICE SIZE & VOLTAGE REQUIREMENTS.

1. ALL LANDSCAPING SHOWN ON THIS PLAN SHALL BE MAINTAINED IN A NEAT AND ADEQUATE MANNER REQUIRED MAINTENANCE ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO MOWING OF LAWNS, TRIMMING OF HEDGES, ADEQUATE IRRIGATION, REPLACEMENT OF DEAD, DISEASED OR UNSIGHLY PLANT MATERIAL REMOVAL OF WEEDS FROM PLANTED AREAS. AND APPROPRIATE PRUNING OF PLANT MATERIALS UNTIL



PLANTING SCHEDULE:

KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	HEIGHT	WIDTH	WATER
DECIDU	IOUS SHADE TREES						1
NLC	Populus angustifolia	Narrowleaf Cottonwood	2.5" cal.	as shown	60'	20-30'	L-M
CRC	Prunus virginiana 'Canada Red'	Canada Red Chokecherry	2.5" cal.	as shown	25'	20'	L-M
EVERG	REEN TREES						
EMS	Picea engelmannii	Engelmann Spruce	6'	as shown	60-80'	10-15'	М
CBS	Picea pungens	Colorado Blue Spruce	6'	as shown	40-60'	10-20'	М
BCP	Pinus aristata	Bristlecone Pine	6'	as shown	25-30'	10-15'	X-L
LPP	Pinus contorta var. latifolia	Lodgepole Pine	6'	as shown	40-60'	20-30'	L
LMP	Pinus flexilis	Limber Pine	6'	as shown	40-60'	20-30'	L-M
VWP	Pinus flexilis 'Vanderwolf's Pyramid'	Vanderwolf's Pyramid Limber Pine	6'	as shown	20'	10'	М
DECIDU	IOUS ORNAMENTAL TREES						
ASP	Populus tremuloides	Quaking Aspen	2.5" cal.	as shown	30-35'	15'	М
HCA	Malus 'hopa'	Hopa Crabapple	2-2.5" cal.	as shown	15 - 20'	15-20'	L-M
RHT	Crataegus ambigua	Russian Hawthorn	2-2.5" cal.	as shown	15'	15'	XL-M
FGM	Acer Ginnala 'Flame'	Flame Ginnala Maple	2-2.5" cal.	as shown	15'	15'	L-M
EVERG	REEN SHRUBS						
BFJ	Juniperus sabina 'Buffalo'	Buffalo Juniper	#5	4' o.c.	12"	6'	L
MPS	Pinus mugo	Mugo Pine	#5	10' o.c.	10-20'	10-20'	L
DMP	Pinus mugo 'White Bud'	Dwarf Mugo Pine	#5	4' o.c.	3-4'	3-4'	L
DECIDU	IOUS SHRUBS					1	1
RMB	Betula occidentalis 'Fontinalis'	Rocky Mountain Birch	#5	10' o.c.	10-25'	10-15'	M-H
PBS	Prunus besseyi 'Pawnee Buttes'	Pawnee Buttes Sand Cherry	#5	3.5' o.c.	1-2'	4-6'	L-M
RBB	Chrysothamnus nauseosus	Rabbitbrush	#5	4' o.c.	4'	4'	X-L
RTD	Cornus sericea	Redtwig Dogwood	#5	6' o.c.	6-8'	6-10'	М
ADG	Cornus sericea Arctic Fire	Arctic Fire Dogwood	#5	3' o.c.	3-4'	3-4'	М
DNK	Physocarpus opulifolius 'Nanus	Dwarf Ninebark	#5	4' o.c.	5'	5'	L-M
JMP	Potentilla fruticosa 'Jackmanii'	Jackman Potentilla	#5	3'o.c.	3-4'	2-3'	L-M
DGM	Acer ginnala 'Compacta'	Dwarf Ginnala Maple	#5	6' o.c.	8'	8'	М
APC	Ribes alpinum	Alpine Currant	#5	3' o.c.	3-6'	3-6'	L
YFC	Ribes aureum	Yellow Flowering Currant	#5	4' o.c.	4-6'	4-6'	L
DAW	Salix purpurea 'Nana'	Dwarf Arctic Willow	#5	6' o.c.	4-6'	4-6'	М
SPB	Caragana arborescens	Siberian Peashrub	#5	4'o.c.	6-8'	4-6'	X-L-M
CPL	Syringa vulgaris	Common Purple Lilac	#5	8' o.c.	15'	8'	М
RMS	Rhus glabra 'Cismontana'	Rocky Mountain Sumac	#5	5' o.c.	5-6'	5'-6'	X-L
TLS	Rhus trilobata	Three-Leaf Sumac	#5	4' o.c.	3-4'	3-4'	L
SBV	Viburnum opulus sterilis 'Roseum	Snowball Viburnum	#5	8' o.c.	8-12'	8-12'	М
GROUND			_				
KNK	Arctostaphylos 'uva-ursi'	Kinnikinnik Manzanita	#5	4' 0.C.	6"-12"	4'	L
СМА	Manonia repens	Creeping Manonia	#5	3' 0.C.	18-24"	3-4'	L
YAR	Achillea millefolium	Common Yarrow	#1	24" 0.C.	18-24"	2-3'	L
PEN	Penstemon strictus		#1	18" 0.C.	12-24"	12-18"	L
AJS	Securi speciable 'Autumn Joy'	Autumini Joy Sedum	#1	24" 0.C.	18-36"	18-24"	L
		Rea Valerian	#1	24" 0.C.	24-36"	24-36"	L
KINIC	Aquileyia caerulea		#1	12" 0.C.	ð"-12"	12"	L
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NOTE - TOTALS ARE FOR CONTRACTOR CONVENIENCE ONLY. WHERE CONFLICT OCCURS, THE AREAS/QUANTITIES SHOWN ON THE PLAN SHALL PREVAIL.

RAINGARDEN SEED MIX:

Total lbs per acre:			2	8.9
Sub-Totals:			27.5	2
Dalea (Petalostemum) purpurea ¹	Purple prairieclover			4
Ratibida columnifera ¹	Prairie coneflower			4
Gaillardia aristata 1	Blanket flower			8
Aster laevis ¹	Blue aster			4
Artemesia frigida	Pasture sage			2
Sporobolus cryptandrus	Sand dropseed		3	
Sporobolus airoides	Alkali sacaton		3	
Schizachyrium scoparium	Little bluestem	Patura	3	
Pascopyrum smithii	Western wheatgrass	Ariba	3	
Panicum virgatum	Switchgrass	Blackwell	4	
Orizopsis hymenoides	Indian ricegrass	Paloma	3	
Calamovilfa longifolia	Prairie sandreed	Goshen	3	
Bouteloua curtipendula	Sideoats grama	Butte	3	
Andropogon hallii	Sand bluegrass	Garden	3.5	
BOTANICAL NAME	COMMON NAME	VARIETY	PLS ² / ACRE	C A

Wildflower seed (optional) for a more diverse and natural look.

 2 PLS = Pure Live Seed.

DRYLAND SEED MIX:

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BOTANICAL NAME	COMMON NAME	%	PLS / ACRE
Elymus canadensis	Canada Wildrye	20	5
Agropyron cristatum	Crested Wheatgrass	15	3.75
Elymus trachycaulus	Slender Wheatgrass	15	3.75
Festuca perennis	Annual Ryegrass	10	2.5
Festuca ovina	Sheep Fescue	10	2.5
Andropogon gerardii	Big Bluestem	10	2.5
Bouteloua curtipendula	Sideoats Grama	10	2.5
Poa compressa	Canada Bluegrass	5	1.25
Bouteloua gracilis	Blue Grama Grass	5	1.25
Total lbs per acre:		100	25



CLIENT:

HIGHLAND DEVELOPMENT GROUP 2100 DOWNING STREET DENVER, CO 80205

CONSULTANT:

OXBOW DESIGN COLLAB., LTD. 209 KALAMATH STREET, #6 DENVER, CO 80223 720.465.6168 WWW.OXBOWDBC.COM

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	2	12-19-2022	FINAL PLAT
	3	03-15-2023	FINAL PLAT
	4	05-26-2023	FINAL PLAT
	5	09-27-2023	FINAL PLAT
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MATERIAL LEGEND:

UNDISTURBED LANDSCAPE

IDLEWILD D ROAD \square \vdash AT ML OJOURN 98 SKI IDLEV /INTER PARI

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CLOSURE	

WESTERN RED CEDAR "GORILLA HAIR"



ISSUE DATE: __03-23-2022 DRAWN: JY REVIEWED: D RFI: # DATE: DESCRIPTION 1 06-29-2022 FINAL PLAT 2 <u>12-19-2022</u> FINAL PLAT <u>3</u> 03-15-2023 FINAL PLAT 4 05-26-2023 FINAL PLAT 5 09-27-2023 FINAL PLAT PROJECT NUMBER: 21-025 LANDSCAPE PLAN

L1.2

SHEET NUMBER:

CONSULTANT: OXBOW DESIGN COLLAB., LTD. 209 KALAMATH STREET, #6 DENVER, CO 80223 720.465.6168

80482

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≥ 39 80

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CLIENT: HIGHLAND DEVELOPMENT GROUP 2100 DOWNING STREET DENVER, CO 80205



FENCE RE: CIVIL	
RETAINING WALL RE: CIVIL	

MATERIAL LEGEND:

PLANTING BED -MULCH - TYPE I MULCH - TYPE II 1.5" RIVER ROCK

WESTERN RED CEDAR "GORILLA HAIR"

OXt DESIGN COLLABORATIVE

HIGHLAND DEVELOPMENT GROUP

OXBOW DESIGN COLLAB., LTD.

DENVER, CO 80223 720.465.6168

209 KALAMATH STREET, #6

DENVER, CO 80205 CONSULTANT:

WWW.OXBOWDBC.COM

CLIENT: 2100 DOWNING STREET



(PROTECT IN PLACE) EXISTING WETLANDS (PROTECT IN PLACE)

DRYLAND NATIVE SEED MIX

RAINGARDEN SEED MIX

UNDISTURBED LANDSCAPE

RE: SHT. L0.1

RE: SHT. L0.1

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80482 IDLEWILD D ROAD ORADO, COL \square ₹ AT OJOURN A 98 SKI IDLEWIL /INTER PARK, ≥ 39 80

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WESTERN RED CEDAR "GORILLA HAIR"



HIGHLAND DEVELOPMENT GROUP

OXBOW DESIGN COLLAB., LTD. 209 KALAMATH STREET, #6

482

CLIENT:

2100 DOWNING STREET

DENVER, CO 80205

CONSULTANT:

DENVER, CO 80223

WWW.OXBOWDBC.COM

720.465.6168

ISSUE DATE: 03-23-202 DRAWN: JY REVIEWED: DG RFI: # DATE: DESCRIPTION 1 06-29-2022 FINAL PLAT 2 12-19-2022 FINAL PLAT <u>3</u> 03-15-2023 FINAL PLAT 4 05-26-2023 FINAL PLAT 5 09-27-2023 FINAL PLAT PROJECT NUMBER: 21-025 LANDSCAPE PLAN SHEET NUMBER

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80 IDLEWILD D ROAD ADO OR COL \square -A ≦ ARK, OJOURN 98 SKI IDLEV /INTER PARI ≥ 39 80





RAINGARDEN SEED MIX

UNDISTURBED LANDSCAPE

(PROTECT IN PLACE)

EXISTING WETLANDS

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WESTERN RED CEDAR "GORILLA HAIR"



80482 IDLEWILD D ROAD ADO. OR COL \square -A ≦ ARK, OJOURN 98 SKI IDLEV /INTER PARI ≥ 39 80

CONSULTANT: OXBOW DESIGN COLLAB., LTD. 209 KALAMATH STREET, #6 DENVER, CO 80223 720.465.6168 WWW.OXBOWDBC.COM

CLIENT:

2100 DOWNING STREET

DENVER, CO 80205



HIGHLAND DEVELOPMENT GROUP

LANDSCAPE PLAN SCALE: 1" = 20"

L1.6

TOWN OF WINTER PARK - ZONED R-2 (MULTI-FAMILY RESIDENTIAL)

PROPERTY LINE



MATERIAL LEGEND:





SITE KEY MAP: NTS





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RE: SHT. L0.1

RE: SHT. L0.1

(PROTECT IN PLACE)

EXISTING WETLANDS

DRYLAND NATIVE SEED MIX

RAINGARDEN SEED MIX

UNDISTURBED LANDSCAPE (PROTECT IN PLACE)

IDLEWILD D ROAD ORADO, COL \square -A ≦ ARK, OJOURN 98 SKI IDLEV /INTER PARI

≥ 39 80

PLANTING LEGEND:

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LOT LINES
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FENCE RE: CIVIL
RETAINING WALL RE: CIVIL

TRASH ENCLOSURE

SNOW STORAGE AREA

RE: ARCH

PROPERTY LINE LOT LINES

SHEET MATCHLINE

PLANTING BED -MULCH - TYPE I WESTERN RED CEDAR "GORILLA HAIR" MULCH - TYPE II 1.5" RIVER ROCK

MULCH TYPE III

PAVING TYPE I

BLDG. OVERHANG

LANDSCAPE BOULDERS RE: DTL. 7 / SHT. L2.1

4" CONCRETE

GRAVEL

RE: ARCH

3-6" RIVER COBBLE



HIGHLAND DEVELOPMENT GROUP

OXBOW DESIGN COLLAB., LTD. 209 KALAMATH STREET, #6

80482

CLIENT:

2100 DOWNING STREET

DENVER, CO 80205

CONSULTANT:

DENVER, CO 80223 720.465.6168

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DRYLAND NATIVE SEED MIX

DENVER, CO 80205

OXBOW DESIGN COLLAB., LTD.

80482

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≥ 39 80

ISSUE DATE: <u>03-23-202</u>

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RFI: # DATE: DESCRIPTION

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4 05-26-2023 FINAL PLAT

5 09-27-2023 FINAL PLAT

PROJECT NUMBER: 21-025

LANDSCAPE

PLAN

SHEET NUMBER

L1.7

REVIEWED: DG

CONSULTANT:

DENVER, CO 80223

WWW.OXBOWDBC.COM

IDLEWILD D ROAD

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720.465.6168

209 KALAMATH STREET, #6

CLIENT: HIGHLAND DEVELOPMENT GROUP 2100 DOWNING STREET

OXDOU DESIGN COLLABORATIVE

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WESTERN RED CEDAR "GORILLA HAIR"







MATERIAL LEGEND:

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MATCHLINE: L1.6





SITE KEY MAP: NTS



RAINGARDEN SEED MIX RE: SHT. L0.1 UNDISTURBED LANDSCAPE

SOD

(PROTECT IN PLACE)

DRYLAND NATIVE SEED MIX

RE: SHT. L0.1

EXISTING WETLANDS

(PROTECT IN PLACE)

PLANTING LEGEND:

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<u> → · · · </u>
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Т

PROPERTY LINE	
LOT LINES	
LIMIT OF GRADING	
EDGER	
SWALE CENTERLINE	
FENCE RE: CIVIL	
RETAINING WALL RE: CIVIL	

TRASH ENCLOSURE

SNOW STORAGE AREA

RE: ARCH

SHEET MATCHLINE	
PROPERTY LINE	
LOT LINES	
LIMIT OF GRADING	
EDGER	
SWALE CENTERLINE	
FENCE RE: CIVIL	
RETAINING WALL	

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PLANTING BED -MULCH - TYPE I WESTERN RED CEDAR "GORILLA HAIR" MULCH - TYPE II 1.5" RIVER ROCK

MULCH TYPE III

PAVING TYPE I

BLDG. OVERHANG

LANDSCAPE BOULDERS

RE: DTL. 7 / SHT. L2.1

4" CONCRETE

GRAVEL

RE: ARCH

3-6" RIVER COBBLE



80482 DLEWILD P ROAD -ORADO, COL \square AT ML OJOURN A 98 SKI IDLEWIL /INTER PARK, 0 ≤ 39 80

DENVER, CO 80205 CONSULTANT: OXBOW DESIGN COLLAB., LTD.

209 KALAMATH STREET, #6

DENVER, CO 80223

WWW.OXBOWDBC.COM

720.465.6168

CLIENT: HIGHLAND DEVELOPMENT GROUP 2100 DOWNING STREET



RAINGARDEN SEED MIX

DRYLAND NATIVE SEED MIX

MATERIAL LEGEND:

WESTERN RED CEDAR "GORILLA HAIR"



HIGHLAND DEVELOPMENT GROUP

OXBOW DESIGN COLLAB., LTD.

CLIENT:

2100 DOWNING STREET

DENVER, CO 80205

CONSULTANT:

DENVER, CO 80223

WWW.OXBOWDBC.COM

720.465.6168

209 KALAMATH STREET, #6

80482 IDLEWILD D ROAD ORADO, COL \square AT ∛L ARK, OJOURN 98 SKI IDLEV /INTER PARI ≥ 39 80

ISSUE DATE:	03	3-23-2022									
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	_1	06-29-2022	FINAL PLAT								
	2	12-19-2022	FINAL PLAT								
	3	03-15-2023	FINAL PLAT								
	4	05-26-2023	FINAL PLAT								
	_5	09-27-2023	FINAL PLAT								
PROJI	ECTN	IUMBER: 21	-025								
FLAN											

L1.9

SHEET NUMBER











PRUNE ONLY BROKEN AND DEAD WOOD FROM CANOPY PER INDUSTRY BEST MANAGEMENT PRACTICES.

DECIDUOUS TREE FALL PLANTING: WRAP TRUNK TO FIRST BRANCH WITH SPECIFIED TREE WRAP MATERIAL. SECURE AT TOP WITH MASKING TAPE. DO NOT WRAP ROUGH BARK TREES. REMOVE TRUNK WRAP IN SPRING AFTER LAST

—12" NYLON TREE STRAP WITH GROMMETS ON GUY WIRE. DO NOT TWIST STRAPS TIGHT AROUND TRUNK. -1/2" DIAMETER WHITE PVC PIPE SECTION ON ENTIRE LENGTH OF EACH WIRE.

—14-GAUGE GALVANIZED WIRE, DOUBLE STRAND. LEAVE 1" TO 2" SLACK IN WIRE TO ALLOW FOR TRUNK MOVEMENT. - IF NEEDED, 6' STEEL POST OR WOOD STAKE, BOTH WITH

SAFETY CAPS. SET ONE POST TO WINDWARD SIDE AND OTHER OPPOSITE. INSTALL POSTS TO 2' DEPTH IN UNDISTURBED SUBGRADE, AND ADD SAFETY CAPS. OTHER STAKING METHODS MUST BE PRE-APPROVED.

OPEN TOP OF BURLAP AND CAREFULLY REMOVE SOIL FROM TOP OF ROOT BALL TO EXPOSE ROOT FLARE TO TOP OF FIRST ORDER ROOTS. SET TOP OF ROOT FLARE/FIRST ORDER ROOTS AT OR 1" TO 2" ABOVE FINISH GRADE. PRUNE ADVENTITIOUS ROOTS ON TRUNK.

CIRCLE OF SHREDDED WOOD MULCH, 3" DEEP AND 4" TO 6" AWAY FROM TRUNK, 5' DIAMETER OR TO OUTER EDGE OF PLANTING HOLE, WHICHEVER IS GREATER. FORM 2" HIGH SOIL SAUCER AROUND PLANTING HOLE AT OUTSIDE OF TRANSITION ZONE.

-FINISH GRADE -NATIVE SOIL OR AMENDED PER SOIL TEST RECOMMENDATIONS. SLOPE SIDES OF PLANTING HOLE, SCARIFY AND ROUGHEN

SIDES PRIOR TO INSTALLING TREE. PRIOR TO PLACING ROOT BALL IN PLANTING HOLE, REMOVE ALL TWINE AND BOTTOM 1/4 OF WIRE BASKET. CAREFULLY PLACE ROOT BALL INTO PLANTING HOLE, SET IN FINAL LOCATION, AND REMOVE REMAINING WIRE. CUT AND GENTLY REMOVE MIN. 2/3 OF BURLAP FROM TOP AND SIDES OF ROOT BALL. PRUNE CIRCLING OR GIRDLING ROOTS AT AND ON OUTSIDE OF ROOT BALL TO PERPENDICULAR ANGLE FROM TRUNK. REMOVE DEBRIS FROM PLANTING HOLE. -UNDISTURBED SUBGRADE.

ANY BROKEN, CRUMBLING, OR OTHERWISE DAMAGED ROOTBALL SHALL NOT BE PLANTED.

UOOUXC DESIGN COLLABORATIVE

CLIENT:

HIGHLAND DEVELOPMENT GROUP 2100 DOWNING STREET DENVER, CO 80205

CONSULTANT:

OXBOW DESIGN COLLAB., LTD. 209 KALAMATH STREET, #6 DENVER, CO 80223 720.465.6168 WWW.OXBOWDBC.COM

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REMOVE ONLY INJURED OR DEAD BRANCHES FROM SHRUBS. SHRUB SPACING AS PER PLANS, LAYOUT VARIES.

PLACE 3' DIA. MIN. RING OF MULCH UNDER SHRUB

REMOVE CONTAINER OR COMPLETELY /PEEL BACK, CUT AND REMOVE 1/3rd OF THE BURLAP. REMOVE ALL ROPE, TWINE AND WIRE. SET ROOTBALL PLUMB IN CENTER OF PIT WITH TOP OF ROOTBALL 2" ABOVE FINISH GRADE, BANK SOIL TO TOP OF THE ROOTBALL.

REMOVE DISH WHEN READY TO SOD OR SEED, CONDITION VARIES.

PREPARE AND PLACE PLANTING SOIL MIX AS PER SPEC. SET ROOTBALL ON UNDISTURBED SUBGRADE COMPACTED SUBGRADE



NOTE: ALIGN STAKES PARALLEL WITH DIRECTION OF PREVAILING WIND. ALL STAKES TO BE CONSISTENT

ALIGNMENT.

TREE GUYING IN OPEN AREAS

EDGE OF WALK OR CURB

TREE GUYING OR THREE STAKE LAYOUT

STAKES PARALLEL WITH ROAD OR WALKS

TREE GUYING DETAIL 3 L2.1 SCALE: 3/4" = 1'-0"



PROJECT NUMBER: 21-025

LANDSCAPE DETAILS

SHEET NUMBER:

L2.1



1 **T.O. SUBFLOOR LVL 1** A1.0 1/8" = 1'-0"



2 **T.O. SUBFLOOR LVL 2** A1.0 1/8" = 1'-0"



3 **T.O. SUBFLOOR LVL 3** A1.0 1/8" = 1'-0"

Rł architecture + planning

1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

BUILDING No. SKI IDLEWILD ROAD, WINTER PARK, ME, **OH** ROW

 $\overline{}$

CO 80482





02/13/2024









0' 2' 4'

8'

16'



0' 2' 4'



1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

No. SKI IDLEWILD ROAD, WINTER PARK, BUILDING ME, **OH** ROW

CO 80482



LEVEL 1B FLOOR PLAN 02/13/2024





0' 2' 4'

1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

CO 80482

architecture + planning



| [____] 0' 2' 4'

1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

CO 80482

02/13/2024

6

1 Fm

18' - 0"

18' - 0"

CO 80482 N AT IDLEWILD , WINTER PARK, (SKI IDLEWILD ROAD, V

02/13/2024

 $\overline{}$ No. N AT IDLEWILD , WINTER PARK, (BUILDING SKI IDLEWILD ROAD, V МП, **P** ROW

CO 80482

ROOF PLAN 02/13/2024

BUILDING No SKI IDLEWILD ROAD WINTER PARK GRAND COUNTY, CO, 80482 ME, Р ROW

N

02/13/2024

1 **T.O. SUBFLOOR LVL 2** A1.2 1/4" = 1'-0"

1301 Walnut Street, Suite 101 Boulder, CO 80302 720-530-5901

N

BUILDING No

, М Ш

ROW HO

SKI IDLEWILD ROAD WINTER PARK GRAND COUNTY, CO, 80482

16'

0' 2' 4'

FLOOR PLANS 02/13/2024

Specifications

Depth (D1):

Depth (D2):

Height:

Width:

Weight:

(without options)

20

D2

Catalog Number

Notes

Туре W1

Hit the Tab key or mouse over the page to see all interactive elements

Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC1 delivers up to 3,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of ARC1, with its integrated emergency battery backup option, is ideal for over-the-door applications.

ARC LED Family Overview

6.5"

4.75"

5"

11"

7 lbs

Luminaina	Chandrad FM 0%	Cold EM, -20°C	Approximate Lumens (4000K)							
Luminaire	Standard EM, V C		P1	P2	P3	P4	P5			
ARC1 LED	4W		1,500	2,000	3,000					
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500			

Ordering Information

EXAMPLE: ARC1 LED P2 40K MVOLT PE DDBXD

Series	Package	Color Temperature	Voltage	Options	
ARC1 LED	P1 1,500 Lumens P2 2,000 Lumens P3 3,000 Lumens	30K 3000K 40K 4000K 50K 5000K	MVOLT 3471	E4WH Emergency battery backup, CEC compliant (4W, 0°C min) ¹ PE Button type photocell for dusk-to-dawn operation DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) ² SPD6KV 6kV surge protection FAO Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100% ²	DDBXDDark bronzeDBLXDBlackDNAXDNatural aluminumDWHXDWhiteDSSXDSandstoneDDBTXDTextured dark bronzeDBLBXDTextured blackDNATXDTextured natural aluminumDWHGXDTextured whiteDSSTXDTextured sandstone

	Accessories Ordered and shipped separately.
WSBBW DDBXD U	Surface - mounted back box (specify finish)

NOTES

347V not available with E4WH. 1 2 FAO not available with DMG.

Cylinder 7" 1 Light Wall Light Black

W2 SPECIFICATIONS

Certifications/Qualifications

Dark Sky Compliant	Yes www.kichler.com/warranty
Dimensions	
Base Backplate	5.00 X 4.75
Extension	7.00"
Weight	0.95 LBS
Height from center of Wall opening	3.50"
(Spec Sheet)	
Height	7.00"

Light Source

Width

Lamp Included Lamp Type Light Source Max or Nominal Watt # of Bulbs/LED Modules Socket Type Socket Wire

Mounting/Installation

Interior/Exterior Location Rating Mounting Style Mounting Weight

FIXTURE ATTRIBUTES

Housing

Primary Material

ALUMINUM

4.75"

BR30

65W

150"

Wet Wall Mount

Exterior

0.95 LBS

1 Medium

Not Included

Incandescent

Product/Ordering Information	
SKU	9234BK
Finish	Black
Style	Contemporary
UPC	783927536783

Finish Options

Black

Brushed Aluminum

Architectural Bronze

White

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Buy American

d"series

Specifications

Luminaire

Width:	13-3/4" (34.9 cm)	Weight:	12 lb : (5.4 kg
Depth:	10" (25.4 cm)		
Height:	6-3/8" (16.2 cm)		

Back Box (BBW, E20WC) 13-3/4″ BBW 5 lbs Width: (34.9 cm) Weight: (2.3 kg) 10 lbs Λ" E20WC Dept

Depth:	4 (10.2 cm)	Weight:	(4.5)
Height:	6-3/8" (16.2 cm)		

(g)

Catalog Numbe

Notes

Type W3

Introduction

The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

DSXW1 LED												
Series	LEDs	Drive Current	Color temperate						Ig	Control Options		
DSXW1 LEE	 10C 10 LEDs (one engine) 20C 20 LEDs (two engines) ³ 	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A) 1	30K 3000 40K 4000 50K 5000 AMBPC Ambe phosp convert	K T K T K T rr T vhor T rted T	125 Ty 12M Ty 135 Ty 13M Ty 14M Ty 1FTM Fo M	pe II Short pe II Medium pe III Short pe III Medium pe IV Medium rward Throw edium	MVOLT ² 120 ³ 208 ³ 240 ³ 277 ³ 347 ^{3,4} 480 ^{3,4}	Shipped included (blank) Surface mounting bracket BBW Surface- mounted back box (for conduit entry) ⁵		Shipped in PE DMG PIR PIRH PIRHFC3V PIRH1FC3V E20WC	Photoe 0-10v o use wit 180° m 180° m Motion ambier K Motion ambier Emerge compo	lectric cell, button type ⁶ dimming wires pulled outside fixture (for th an external control, ordered separately) notion/ambient light sensor, <15' mtg ht ^{1,2} notion/ambient light sensor, 15-30' mtg ht ^{1,2} //ambient sensor, 8-15' mounting height, it sensor enabled at 1fc ^{1,2} //ambient sensor, 15-30' mounting height, it sensor enabled at 1fc ^{1,2} ency battery backup (includes external nent enclosure), CA Title 20 compliant ^{8,9}
Other Optio			Fi									
Shipped in SF Sin DF Do HS Ho	nstalled Igle fuse (120, 277 or 34) uble fuse (208, 240 or 48 use-side shield ¹¹	Shipped separ 7V) ^{3,10} BSW Bird-de 10V) ^{3,10} VG Vandal DDL Diffuse	rately ¹¹ C eterrent spikes C guard C d drop lens C	DDBXD DBLXD DNAXD DWHXD	Dark bron Black Natural al White	ze uminum	DSSXD DDBTXD DBLBXD DNATXD	Sandstor Textured Textured Textured	ne dark bronze black natural alumini	D D Jm	WHGXD SSTXD	Textured white Textured sandstone

HS	House-side shield 11
SPD	Separate surge protection

DSXWHS U

DSXWBSW U

DSXW1VG U

Accessories
Ordered and shipped separately

light engine)

House-side shield (one per

Bird-deterrent spikes

Vandal guard accessory

NOTES

- 20C 1000 is not available with PIR, PIRH, PIR1FC3V or PIRH1FC3V 1
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). 2
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option. 3

- Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH. 4
- Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory. 5
- Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH). 6
- Reference Motion Sensor table on page 3.

Diffused drop lens

Same as old ELCW. Cold weather (-20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.lithonia.com 8 0

Not available with SPD. 10 Not available with E20WC.

- 11 Also available as a separate accessory; see Accessories information.
- 12 Not available with E20WC.

2/23/2024

 $\begin{smallmatrix} 0.0 & 0$ 0.0₊0.0 0.0₊0.0 W2 W2 W2 0.0 0.0 0.0 0.0₊0.0 0.0 ₊0.0 _0.1/_0.8 /1.3 _0.0 <0.1 _0.2 _0.3 0.6 0.3 0.2 0.1 0.1 0.1 $_{10.0}^{0.0}$ 12'-0"XFG_ (2) (1.9) (0.8) (0.4) (0.2) (0.1) (0.1) (0.1) $_{+}0.0$ $_{+}0.0$ $_{+}0.0$ $_{+}0.0$ $_{+}0.1$ $_{+}0.6$ $_{+}0.7$ _0.0 _0.′ __0.8 /_0.2 W1 W2 W2 W1 W2W2 0.0₊0.0 _0.6 _0.3 _0.2 _0.1 _0. 1.3 0. W1 0.6 _0.3 _0.2 _0.4 1.8 1.2 1.1 1.5 1.8 _0.0 _0.Ø $1.0 + 2 \times 2^{+} \times 2^$ _0.0 _0.0 4.5 +3.2 +2.6 +2.0 +1.4 +0.5 +0.7 $0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ 5.0^{5.3} 4.0 0.0₊0.0₊0.0₊0.0 2.4 1.4 0.8 0.6 0.5 0.4 0.0 _0.0 _ ///W2 1.9 1.9 1.4 0.7 0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.20.0_00_0.0 2.4 2.5 1.6 1.1 $0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ 1.3 1.2 1.8 3.2 3.4 2.0 0.5 0.3 0.2 0.0 0.0 0.1 0.1 0.1 0.0 0.0 1.6 3.0 4.2 4.9 .2 _0.7 _0.4 _0.3 _0.6 _2.2 ____0.0 __0.0 __0.1 __0.1 __0.2 ___0.2 10.0 + 0.1 + 0.1 + 0.2 + 0.3 + 0.9 W2 0.4 0.8 1.5 2.0 1.0 0.9 1.410.0 + 0.1 + 0.1 + 0.2 + 0.3 + 0.4W2 ` _0.0 _0.1 _0.1 $_{+}0.2$ $_{+}0.3$ $_{+}0.4$ $_{+}0.7$ $_{-}$ _0.0 _0.1 $0.2 \quad 0.3 \quad 0.5 \quad 0.6 \quad 0.8 \quad 0.4 \quad 6 \quad W2$ _0.0 _0.1 _0.2 _0.1 AØ) W2 __0.0 __0.0 __0.1 0.7 _0.5 _0.5 w^{20}_{2} W2 0.0 0.0 0.0 0.0 0.1 _0.0 _0.0 _1.2⁄__1.7 __0.9 0.0₊0.0₊0.0 0.7 0.4 0.4 0.5 0.7 0.9 2.0 _0.0 _0.0 ₩2 x.5 D2 _0.0 _0.0 1, <u>______0.5</u> <u>___0.3</u> <u>___0.3</u> <u>___0.4</u> W2 0.4 0.3 0.3 0.0₊0.0 0.4 _0.4 _0.5 / W2 ___0.2 __0.5 __0.8 0.0₊0.0 1.5 0.5 0.4 0.4 0.5 _0.0 _0.0 _0.0 _0.0 1.1 0.5 0.3 0.4 0.6 _0.0 _0.0 _0.2 _0.0 _0.0 _0.5 <u>}</u>0.4 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.2 0.3 0.3 0.4 0.4 0.3 0.4 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0_0.2 _0.2 _0.3 _0.3 _0.3 _0.4 W2 1.3 .0.1 _0.2 _0.2 _0.3 _0.4 _0.4 _1.0 3W2 0.0 + 0.0 + 0.0 + 0.0 + 0.0+0.4 +0.5 +0.7 +1.6 0.0₊0.0₊0.0 W2 +1.2 +2.1 0.0₊0.0₊0.0 .W2 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.5 0.6 W1 1.·W2 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0_0.5 _0.6 _0.6 _0.2 $0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ W2 1.1 1.9 $0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ 0.4 0.5 0.6 $0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ 0.0_{+} 0.0_{+} 0.0 + 0.0 $0.0_{+}0.0_{-}0.0_{+}$ $0.0_{+}0.0_{-}0.0_{+}$ 0.0_{+} $0.0_$ 0.0_{+} $0.0_$ 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.2 0.5 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0_0.1 _0.2 _0.4 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.00.1 0.2 0.2 0.0 + 0.0 + 0.0 + 0.0 + 0.0 + 0.0 0.0_{+} 0.0_{+} $0.0_{+}0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ 0.0₊0.0₊0.0₊0.0 0.0 + 0.0 + 0.0 + 0.0 + 0.00.0 0.0

0.2 0.2 0.4 0.6 1.4

0.3 0.3 0.2 0.1 0.2 0.8 1.1 0.0 0.1 0.1 0.1 $^{+1.3}$ $_{+0.5}$ $^{+0.2}$ $^{+0.3}$ $^{+0.9}$ $^{+0.9}$ $^{+0.3}$ $^{+0.2}$ $^{+0.3}$ $^{+0.2}$ $^{+0.3}$ W2 W2 0.0 0.0 0.0 0.0 1.2 0.4 0.3 0.6 1.5 1.5 0.5 0.5 0.7 0.0 0.0 0.0_{+} 0.0_{+} 0.0_{+} 0.0_{+} 0.0_{+} (⁺) W2 $0.0_{+}0.0_{+}0.0_{+}0.0_{+}$ 0.0 0.0 0.4 0.5 0.9 1.8 W1 [W2W2] W1 ^{3.7}, ^{5.9} 1.1 ₁0.2 \Q.7 0.5 0.4 0.7 1.6 3.8 1.3 2.3 2.4 2.3 W2 1.4 1.7 1.8 0.8 1.6 3.2W1 0.7 0.5 1.3 W2 ____2.3 _0.8 _0.5 _0.6 _1.2 _2.5 _3.0 \ 1.3 1.2 1.4 1.5 0.5 1.5 1.7 1.8 1.6 60____0.1 ___0.1 /__0.2 ___0.3 1.3 0.5 0.5 0.8 1.6 3.1 _0.0 _0.0 +0.7 +0.9 +0.9 1.9 1.1 0.6 0.6 0.9 1.8 0.4 0.5 0.7 0.8 8.6 W3 +5.9 W2 + 0.3 + 0.6 + 0.8 + 0.8 + 0.8 4.1 **€** 2.2/ 1.0 0.6 12'-0"AFG 1.9 2.0 3.0 5.2 5.9 4.2 _0.4 / _0.3 _0.3 _0.4 _1.5 0.5 _0.9 _1.8 _2.3 _3.1 _2.8 _4.4 _5.7 _5.3 _ ¹,0,2**W3**).0 <u>1.0</u> 0.7 ±2().8 <u>5</u>.9 <u>3.3</u> 4 +5.4 +5.6 +4.1 +2.2 W2 +^{1.4} W2 _0.5 23 3.2 3.8 4.0 12'-0"AFG () - X f 3^{+}_{+} 3^{+}_{+} 1.2^{+}_{+} 1.0^{+}_{+} 1.4^{+}_{+} 2.2^{+}_{+} 2.8^{+}_{+} 4^{+}_{+} W3 0.7 0.8 0.8 1.3 W2 3.2 W2 /_2.9 /_1.7 _4.2 /_5.2 _4.3 _2.8 12'-0"AFG +0.8 +0.7 +0.8 +0 +1.5 1W2 W3 12 4.4 12'-0"AFG (5)4 W2 // W2 🔍 4.4 1.4 $_{+}0.9$ $_{+}0.9$ 1.02.7 $2.0^{2.0}$ 2.5 $_{1}^{0.3}$ 0.1 W2 111 0.9 0.9 1.3 1.32.0 3.6 5.3 5.2 2.8 _2.1**()**.1) $O_{+}^{1.4}$ + 1.2 + 2.1 + 2.2 + 2.1 + 3.8 + 5 - 6.01.9 2.6 3.3 2.4 2.4 4.4 W3 3.9 3.4 ″ W2∕ 4.3 + 1.4 + 0.5 + 0.7 + W2 V2 2.1 2.4 23 2.2 W2 7 W1 _1.6 _3.1 _4.0 W2 1.2 **N** 1.1 <u>2.4</u> 4.1 **6.6** 2.5 0.6 0.6 1.1 + 1.6 + 1.6 + 3.3O"AFG 1.5 _2.1 _2.8 _4.6 \ Ø 0.5 0.4 0.5 0.8 +0.6 +0.7 +0.8 +1.2 +2.20.9 0.5 0.4 0.6 0.8 0.3 0.2 0.1 0.1 2.2 \ 1.4 _ 0.9 \ + 0.9 W2 5 1 0.8 0.4 0.4 0.6 0.7 0.9 0.7 \W2 OT W2 ¹4.8 ¹4.8 2 ¹ ¹ Q W3 +1.7 +1.0 +0.9 +0.9 +2.2 6,3 ₁.6 ₀,5 ₀.3 ₀.3 ₀.4 W2 🔪 W2 🔪 W2 +1.6 +1.0 +1.0 +1.3 W2 W1 2.9 1.3 4.8 $2.1 \quad 0.4 \quad 0.2 \quad 0.2 \quad 0.4 \quad 0.8 \quad 0.8$ W2 W2 W2 W2 12 W2 67 +1.5 +0.4 0.2 +0.2 +0.3 +0.5 +1.0 $W2^{1}_{0.7} = 0.5 = 0.6 = 0.4$ W2 1.7 1.0 0.9 1.2 0.3 0.5 0.9 1.0 + 0.8 + 0.3 + 0.2 + 0.2 + 0.5 + 1.0 + 2.3_0.1 _0.1 +137 +15 +2.3 +0.8 +0.4 +0.3 +0.52.6 +1.3 +0.7 +0.3 +0.2 +0.3 +0.6 +1.0 , 1.4 1.7 ↓2.4 ↓2.7 ↓0.2 ↓0.1 0.5 0.4 0.5 0.8 W2 W_{3} $\rightarrow 12'_{-}0''$ AF_{3}^{6} $^{2.3}_{+}1.1$ $^{0.4}$ 0.2 $^{0.2}_{+}0.2$ $^{0.5}_{+}0.8$ W2 T W2 1.6 +0.8 +0.4 +0.4 +0.6 1.1 $\begin{array}{c} \begin{array}{c} & & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & &$ W2 3.4 4.7 4.0 2.3 1.0 0.3 0.2 0.2 0.3 0.7 1.2 <u>1</u>.0 0.6 ≪w2 4.6 5.8 4.Y +1.3 (1)1 · W2 1 -1.9 0.2 0.3 0.4 _0<u>,</u>5 _0.4 _0.5 _1.0 $1.4 \pm 5.2 \pm 5.9 \pm 4.3 \pm 25 \pm 2.6$ W3 12'-0"AFG 1. W2 / 1.6 +0.8 0.4 +0.4 +0.7 +1.1 +0.4 +0.4 +0.8 $\begin{array}{c} W3 \\ + 0.2 \\ + 0.2 \\ W2 \\ + 2.5 \\ + 2.5 \\ + 1.2 \\ + 0.8$ W2 +1.0 +0.6 +0.4 +0.4 +0.7 +1.3 +0.8 +0.7 0.1 0.1 0.1 0.2 0.3 0.3 0.5 0.8 1.2 1.3 W^{2} W^{2 1.0 0.3 0.4 3.9 3.3 1.6 0.5 0.3 W2 V_{+}^{2} $V_{+}^{3.8}$ $V_{+}^{3.8}$ $V_{+}^{0.9}$ $V_{+}^{0.4}$ $V_{+}^{0.5}$ $V_{+}^{1.2}$ $V_{+}^{1.2}$ $V_{+}^{1.2}$ $V_{+}^{1.2}$ $V_{+}^{1.2}$ $^{+}$ $\begin{array}{c} \begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$ W2 18 + 1.2 + 0.8 + 1.0 + 1.0 W2 W2 2.0 +2.2 +1.1 +0.5 +0.4 +0.5 (0.8 1.0 _0.2 _1.6 _1.4 _1.2 _1.1 _1.2 1∖5 1.3 ₊0.9 ₊0.9 ___5.3 __33 __1.8 __0.9 __0.4 __0.4 __0.7 _1.5**W2** 0.2 0.3 0.5 1.1 1.2 w2 1.0 0.7 0.8 $\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} 12 \\ 2.2 \end{array} \\ \begin{array}{c} \begin{array}{c} \begin{array}{c} 2.2 \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \begin{array}{c} 12 \\ + \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} 0 \\ + \end{array} \\ \begin{array}{c} 4.3 \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} 3.3 \end{array} \\ \begin{array}{c} 1.7 \end{array} \\ \begin{array}{c} 1.7 \end{array} \\ \begin{array}{c} 0.8 \end{array} \\ \begin{array}{c} 0.4 \end{array} \\ \begin{array}{c} 0.4 \end{array} \\ \begin{array}{c} 0.3 \end{array} \\ \begin{array}{c} 0.4 \end{array} \\ \end{array} \\ \begin{array}{c} 0.4 \end{array} \\ \end{array}$ 1.6 1.7 2.0 1.8 1.3 0.2 0.2 0.2 0.3 0.4 0.7 1.1 O 0.5 0.8 W2 _0.6 _1.0 _1.4 _1.8 _1.9 _20'-0"AFG O W2 1.3 0.8 0.5 1.0 2.2 3.5 3.3 2.1 1.1 0.7 0.6 0.4 0.3 0.2 + 0.2 + 0.2 + 0.2 + 0.3 + 0.6Ŵ3 W2 0.9 +1.8 +1.2 +0.3 (-01 0.2 19'-6"AFG 0.2 0.2 0.6 1.3 2.3 1.8 1.5 0.3 $0.3 \quad 0.5 \quad 0.8 \quad 1.3 \quad 1.3$ 1.4 18 5 3.7 _3.0 _1.7 1.3 1.3 1.5 2.0 0.9 0.4 V_{2}^{2} 0.4 0.4 0.4 0.5 0.8 1.7 0.8 $19^{-}-6^{+}-7^{-}-7^{$ +5.0 +3.1 +2.4 2.8 +3.8 +4.4 +3.3 +1 w2 4. _{1.8} ₄0.6 _0.3 _0.8 _1.5 .W3 🔪 12'-0"AFG +4.7 _3.9 _2.8 _3.0 _4.1 _5 _4.7 W2 W1 W2 T. <u>к</u> W3 0.7 0.8 1.0 2.1 3.9 4.0 2.9 2.0 1.9 2.8 W2 \ _0.4 _0.8 _2.1 _3.5 _3.4 **2**.1 _1.1 _1.3 _0.8 \ +0.7**~^^!**\ ∖2.8 4.0 2.1 1.0 + 0.8 + 0.7 + 1.0 + 1.0 + 1.0¹%W2 +0.4 +0.4 +0.2 +0.3 +0.3 $+0.5^{12'}$ +0.3 $+0.5^{12'}$ +0.3 $+0.5^{12'}$ +0.5 +0.5 +0.5 +0.8 +0.W2 0.5 0.5 3 W2 **W**2 +^{3.8} W2 1.2 1.0 0.9 W2 . W2 J.O 0.8 \1.0 _2.1**()**11. W2 W2 **€**₩2 1.4 +1.0 +0.8 +1.9 $\begin{array}{c} 0 \\ + 0.2 \\ + 0.2 \\ + 0.2 \\ + 0.2 \\ + 0.2 \\ + 0.2 \\ + 0.3 \\ + 0.3 \\ + 0.3 \\ + 0.4 \\ + 0.6 \\ + 1.2 \end{array}$ _0.4 _0.8 _1.1 0.3 W2 1.9 1.1 0.9 0.9 1.4 W2 ‴W2 ∖\ W2

A. ANY PROPOSED LIG	SHT FIXTURES INSTALLED ON PRIVATE PROPERTY, ADJACENT TO THE PUBLIC ROW,	
SHALL BE ORIENTE: PROBLEMS AND SH	D IN SUCH A MANNER OR LIMITED IN LUMEN OUTPUT TO PREVENT GLARE HALL NOT EXCEED NATIONAL I.E.S. LIGHTING STANDARDS FOR DISABILITY GLARE.	engineering
B. ALL FIXTURES SHAL	LL BE FULL CUT-OFF.	plumbing, mechanical and electrical
.0 _0.0 _0.1 _0.1 _0.1 _0.2 _0.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1717 15th Street Boulder, CO 80302
0 +0.0 +0.1 +0.2 +0.2 +0.2 +0.2	$3 \qquad \qquad$	303.444.6038 phone 303.442.1172 fax
0^{+} 0.0 0.5 0.7^{+} 0.3 0.2^{-} 0.1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	staff@boulderengineering.com
W2 + + + + + + + + + + + + + + + + + + +	$2 \begin{array}{c} \begin{array}{c} + & + & + & + & + & + & + & + & + & + $	
+10+07+0.	2 + 0.1 + 0.1 + 0.1 + 0.0 + 0.1 + 0.4 + 6.8 + 2.6 + 2.1 + 0.7 + 0.2 + 0.1 + 0.2 + 0.6 + 3.3 + 1.7 + 0.0 + 0.6 + 0.1 + 0.2 + 0.6 + 0.3 + 0.0 + 0.6 + 0.1 + 0.0 + 0.6 + 0.1 + 0.0 + 0.6 + 0.1 + 0.0 +	
W2 0.4 +0.	2 + 0.1 + 0.1 + 0.1 + 0.0 + 0.0 + W2 + 0.0 + 0	
W1	1 0.1 0.1 0.1 0.1 0.3 0.0	482
0.6 0.7 0.5 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	PLD
+ + + + + + + + + + + + + + + + + + +	$\begin{array}{c} + & + & + & + & + & + & + & + & + & + $	
, 0.8 , 0.6 , 0.4 , 0.2 , 0.3 , 0.	1 + 0.1 + 0.4 + 0.6 + 0.5 + 0.6 + 0.7 + 0.0 + 0.2 + 2.3 + 6.8 + 3.5 + 1.8 + 0.5 + 0.2 + 0.0 +	μ
0.50.50.50.40.	$1 \qquad \qquad$	
+0.5 +0.8 +0.5 +0.5 +1.W2	W^2 0.9 +0.5 +0.4 +0.3 +0.2 +0.0 +0.0 +0.0 +0.0 +0.0 +2.4 +3.5 +0.7 +0.2 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1	
+0.5 +0.9 +2.1 +10 +22 W1 0.5 0.8 1.8 1.9 06	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	
+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$	$W^{2} + + + + + + + + + + + + + + + + + + +$	
0.5 +0.6 +1.0 +2.0 +4.3 +	$ \begin{array}{c} W_{1} \\ 0 \\ +22 \\ W_{2} \\ +0.3 \\ +0.3 \\ +0.1 \\ +0.1 \\ +0.5 \\ +0.5 \\ +0.5 \\ +0.5 \\ +0.6 \\ +0.6 \\ +0.6 \\ +0.6 \\ +0.6 \\ +0.0 \\ +0.0 \\ +0.2 \\ +0.4 \\ +1.0 \\ +0.4 \\ +1.0 \\ +0.$	
+0.5 +0.5 +0.7 +1.3 +2.5 +2.	0 + 2 + 1.2 + 0.7 + 0.1 + 1.3 + 0.5 + 0.3 + 0.2 + 0.1 + 0.0 + 0.1 + 1.2 + 5 + 0.0	DO OLO
+0.4 +0.4 +0.5 +0.9 +1.6 +2.	6 $^{1.1}$ $^{1.4}$ W2 $^{0.7}$ $^{0.4}$ $^{0.3}$ $^{0.1}$ $^{0.1}$ $^{0.0}$ $^{0.0}$ $^{0.2}$ 0 $^{0.2}$ 0 $^{0.0}$ $^{0.0}$ $^{0.0}$ $^{0.0}$	
+0.5 +0.5 +0.6 +1.0 +1.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	O A
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W1 +1.6 +0.7 +0.6 +0.7	7 + 1.3 + 2.4 + 2.1 + 0.9 + 0.1 + 0.1 + 0.1 + 0.3 + 0.3 + 0.3 + 0.1 + 0.1 + 0.1 + 0.1 + 0.2 + 0.2 + 0.2 + 0.2	SKI
1.0 +0.6 +0.	6 +0.9 +1.6 +2.8 +1.9 +1.7 +0.5 +0.1 +1.5 +0.7 +0.2 +0.1 +0.1 +0.1 +0.2 +0.2 +0.1 +0.1 +0.1 +0.2 +0.2 +0.1 +0.1 +0.2 +0.	
	1.6 + 0.7 + 1.0 + 1.9 + 2.8 + 1.0 + 1.4 + W2 + 0.6 + 0.3 + 0.1 +	
W22.20.	$ \begin{array}{c} 8 \\ + 0.6 \\ + 0.7 \\ + 1.2 \\ + 2.1 \\ + 1.6 \\ + 0.1 \\ + 0.1 \\ + 0.0 \\ + 0.1 \\ + 0.1 \\ + 0.0 \\ + 0.1 \\ + 0.0 \\ + 0.1 \\ + 0.1 \\ + 0.0 \\ + 0.1 \\ + 0.1 \\ + 0.1 \\ + 0.0 \\ + 0.1 \\ + $	No. Description Date
W1 2.1	2^{+} $+0.6^{+}$ $+0.6^{+}$ $+0.8^{+}$ $+1.6^{+}$ $+3.1^{+}$ $+2.0^{+}$ $+6^{-}$ $+1.5^{+}$ $+0.3^{+}$ $+0.1^{+}$ $+0.1^{+}$ $+0.0^{+}$ $+0.$	
W2 05.4 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
W2 W3 + + + + + + + + + + + + + + + + + +	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \\ \end{array} \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \end{array} \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \end{array} \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ $	
+1.2 +2.3 +4.3 +5.4 +4.3 +2.4	.6 + 1.7 + 1.4 + 0.8 + 0.6 + 0.6 + 1.0 + 1.9 + 1.3 + 0.7 + 0.6 + 0.2 + 0.1 + 0.0 +	
2.1 3.8 5.3 4.9 3.1	$\begin{array}{c} 0 \\ 13 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $	
+2.4 (+3.9 +6.2 +5.6 12'-0"AFG	$W_{1} = \begin{array}{c} 2.7 & 0.8 & 0.5 & 0.5 & 1.0 & 0.6 & 1.8 & 0.0 & 0.1 & 0.0$	
+1.7 $+2.7$ $+1.1$ W3 W2	$W^{2}_{12} = 11 05 03 03 02 01 00 00 00 00 00 00$	
+1.3 +0.9 0.8 1.5		
10^{-1}	$W^{2} + T + T + T + T + T + T + T + T + T + $	
3 + 5.9 + 5.2 + 3.7 + 2.3 + 1.7 W	W^2 W^1 $+1.2$ $+0.3$ $+0.1$ $+0.0$ $+0$	
4.0 + 4.4 + 3.5 + 2.1 + 1.3 + 1.4	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} $	
**************************************	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ $	
⁺ 34 ⁺ 3.2 ⁺ 1.9 ⁺ 1.0 ⁺ 0.7 ⁺ 0.	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} 16 \\ 12 \\ \end{array} \\ \end{array} \\ \begin{array}{c} 12 \\ \end{array} \\ \begin{array}{c} 4 \\ \end{array} \\ \begin{array}{c} 25 \\ \end{array} \\ \begin{array}{c} 41 \\ \end{array} \\ \begin{array}{c} 41 \\ \end{array} \\ \begin{array}{c} 28 \\ \end{array} \\ \begin{array}{c} 14 \\ \end{array} \\ \begin{array}{c} 05 \\ \end{array} \\ \begin{array}{c} 0.6 \\ 0.2 \\ \end{array} \\ \begin{array}{c} 0.1 \\ 0.0 \\ 0$	
12-Q"AFC	3 + 2.2 + 3.0 + 2.5 + 1.5 + 0.7 + 0.3 + 0.1 + 0.0 +	
W3 W2 ++ + 42 W2 1	$3_{+1.8} + 1.6 + 1.1 + 0.5 + 0.2 + 0.1 + 0.1 + 0.0 + 0.$	
2.9 3W1 W2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
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+1.4 +1.6 W2''		A BOOTICE NO
+0.9 +2.1 +1 W2	W2 + 12 + 0.7 + 0.3 + 0.1 + 0.1 + 0.0 +	ACT AND A AN
+0.0 +0.9 +0.9 +1.2 W2 0.5 0.7 1.1 0	W2 + 1.4 + 0.4 + 0.2 + 0.1 + 0.0 +	P09/08/2022
+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$	$\begin{array}{c} & & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & &$	SONAL ENGINE
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W1		MEP I

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)	0.0	0.0	0.0	0.0	₊ 0.1	₊ 0.1	₊ 0.1	_0.1
)	0.0	0.0	0.0	0.0	₊ 0.1	₊ 0.1	₊ 0.1	_0.1
)	_0.0	_0.0	_0.0	_0.0	_0.0	_0.1	_0.1	_0.1
)	_0.0	_0.0	_0.0	_0.0	_0.0	_0.0	_0.1	_0.1
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· · · · · · · · · · · · · ·	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0
· · · · · · · · · · · · · · ·	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	<pre>0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,0,+ 0.0,0,+ 0.0,0,+ 0.0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0</pre>	<pre>0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,+ 0.0,0,+ 0.0,0,+ 0.0,0,+ 0.0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$ $^{-}0.0$	$^{+0.0}$ $^{-0.0}$ $^{+0.0}$ $^{-0.0}$
· · · · · · · · · · · · · · · ·	<pre>0.0.4 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	<pre>0.0, 0</pre>	<pre>0.0, 0</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	<pre>0.0.4 .0.0</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	<pre>0.0,+ 0.0,+</pre>	<pre>0.0,+ 0.0,+</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0
· · · · · · · · · · · · · · · · · · ·	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+0.0}$ $^{-0.0}$ $^{+0.0}$ $^{-0.0}$
· · · · · · · · · · · · · · · · · · ·	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	<pre>0.0, 1,0.0</pre>	<pre>0.0, 1,0.0</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
, , , , , , , , , , , , , , , , , , , ,	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	<pre>0.0, 1,0.0</pre>	<pre>0.0, 1,0.0</pre>	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}0.0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+0.0}$ $^{-0.0}$ $^{+0.0}$ $^{-0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+0.0}$ $^{-0.0}$ $^{+0.0}$ $^{-0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{+}0.0$ $^{-}$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+0.0}$ $^{-0.0}$ $^{+0.0}$ $^{-0$	+0.0 +0.0
	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0 +0.0	$^{+}0.0$ $^{-}0.0$ $^{-}$	+0.0 +0.0

W2

_0.2\ _0.2 _0.3 _0.3 _0.4 _0.6 _1.2

 $\wedge / /$

1.9> 1.1

W2

+0.9 +0.9 +1.0 +0.7	+1.4 +0.4	W2 +1.0	2	4.7 ⁺	´ ₊ 1.9 ₊ 3.8	+ ^{1.3} + ^{2.5}	+0.9/~ +22	2/2	4.5 0	+1.5 +		0.5 + + 1.0 +).3 <u>0</u> .	2 _0.1 9 _0.5	+0.1	0.0 0.1	0.0, +0.0 +0.0	0.0+ +0.0	0.0 + 0.0	0.0 ₊ 0.0 ₊	0.0 ₊ 0.0 ₊	0.0 ₊ 0.0 ₊	0.0 ₊ 0.0 ₊	0.0 ₊ 0.0	+0. +0.		bo	ulde	r
2.0 ₊) __ 0.6	3.1	5.2	₊ 5.8	₊ 5.3	₊ 3.3 \	N2	'/ vv		_w:	2	0 1 W2	5.	5 + ^{2.2}	, 0.4	_0.1	_+0.1	,0.0 ₊	0.0	0.0 ₊	_0.0	00+0	0.0 ₊	0.0 ₊	_+ 0 .		en		ering
	2 _{1.6}	2.4 +2.1	4.3 +3.5	₊ 5.5 ₊ 5.0	₊ 5.7 ₊ 5.4	4.1 +6.4							W1		, 0.4 , 0.7	0.2 0.3	0.1 0.2	+0.0	0.0 0.0	0.0 ₊ 0.0	010 0.0	0.0 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	+0. +0.	an 17	<i>d electr</i> 17 15th	<i>rical</i> Street	
W2	1.6	1.8	₊ 2.3	3.3	,3.6 +	+1.4	W2	\downarrow	W2		7			W2 _{).9}	1.2 ₊	_0.9	_0.4	+0.1	_0.1	+ ^{0.0}	_0.0	/ _0.0	0.0	0.0 ₊	_+ 0 .	Bc 30	ulder, C	0 80302	9
	W2		+ ^{1.4}	+1.5	_1.9_	0.5		1.0	5.8	W: C		W2		, ^{2.7}	,2.6	+1.5	0.6 ₊	+0.2	0.1	0.0	0.0	0.0 ₊	0.0 ₊	0.0 ₊	+0.	30 sta	3.442.1 aff@boul	172 fax derenginee	ring.com
 	0.2	• _0.3	+0.5 +0.2	+0.6 +0.2	+0.4 +0.2	+0.4 +0.3	+0.5 +0.3	+ 0.5 +0.5	0.6 +0.6	0.5 +	0.7		0.6 +3.	4.8 ₊ 4.8	,3.6 ,3.1	+ ^{1.9} +1.2	+0.6 +0.3	0.2 ₊ 0.2	+0.1 +0.0	+0.0 +0.0	0.0 + 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	+0. +0.				
Q.3 _0.6	6 ₊ 0.3	,0.2 ₊ 0.2	₊ 0.1	₊ 0.1	_0.2	_0.2	_0.2	_0.3	_0.3	+0.4 +	0.4	0.4 ₊ 0.4).3 1.	9_2.9	2.2	+0.8	0.2	₊ 0.1	+00	_0.0	0.0 ₊	0.0 ₊	0.0 ₊	0.0 ₊	_+ 0 .				
+0.3 +0.4	⊧ ₊ 0.1	_+0.1 0 1	+0.1	0.1 ₊ 0.1	_+0.1 0 1	_+0.1 0 1	_+0.1 0 1	0.2+0.2	+0.2	0.2 +	0.2	0.2 +0.2 +0).6 ₊ 1.	0 ₊ 1.5	, 1.1	+0.4 +0.2	0.1	+ ^{0.1}	0.1	0.0 ₊ 0.0	0.0 ₊	0.0 ₊	0.0 ₊ 0.0	0.0 ₊ 0.0	+0. 0				
+0.0 +0.0	2 ₊ 0.1	+ ^{0.1}	+ ^{0.1}	+0.1 +0.0	+0.1 +0.1	+0.1 +0.1	+0.1 +0.1	+0.1	+0.1	+ ^{0.1} + + ^{0.1} +	0.1	0.1 +0.1 +0).2 ₊ 0.	1 ₊ 0.0	+0.4 +0.2	+ ^{0.2}	+0.1 +0.1	+0.1	+0.1 +0.3	+0.0 +0.4	+0.0 +0.1	+0.0 +0.1	+0.0 +0.1	+ ^{0.0}	+0. +0.				0482
_0.1 _0.1	_0.0	0.0 ₊ 0	0.0 ₊	0.0 ₊	0.0 ₊	0.0 ₊	0.0 ₊	_0.1	0.1	_0.1 _	0.1	0.1 ₊ 0.1).1 ₊ 0.	10.1	₊ 0.1	+ ^{0.1}	+0.1	×_0.3	_0.7	₊ 1.5	+1.6	20	0'-0"/ + ^{0.3}	4FG + ^{∨.} PD1	_+ 0 .)8 0
+0.1 +0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊	0.0 ₊	0.0 ₊	+ 0.0 +	0.0	0.0 ⁰	0.0 ₊ 0.	1 ₊ 0.0	0.1	/ ₊ 0.1	0.4	0.6+	+1.1	+ ^{1.6}	2.0/ 1.8/	2.8		2.6	+0.		$\overline{\mathbf{x}}$		Ŭ
+0.0 +0.0 +0.0 +0.0) ₊ 0.0	, ^{+0.0}	+ ^{0.0}	+ ^{0.0}	+0.0 +0.0	+0.0 +0.0	+ ^{0.0}	+ ^{0.0}	+0.0 +0.0	+ ^{0.0} +	0.0	0.0 +0).0 ₊ 0.	0,_+0.0	+0.1 +0.1	, 0.1	+0.3 +0.3	+0.5	+ ⁺	+ ⁺ ,1.0	+ ⁺ + ^{1.4}	+ ¹ .8	+ ^{2.0}	,1.9	> ⁺ 0. 1.		Ш		ARK ARK
_0.0 _0.0) ₊ 0.0	0.0 ₊ 0.0	0.0	_0.0	0.0 ₊	_0.0	+ ^{0.0}	0.0	+0.0	+0.0+	0.0	0.0 t	0.0 + 0.	0_+0.0	+8.0	0.1	_+0.1	_0.2	+0.4	0.6	_1.0	_1.3	, + ^{1.4}	+1.3	_1. >				
0.0 +0.0 0.0 0.0	0.0 ⁺ 0.0	0.0 + 0.0	0.0 ₊ 0.0	0.0 + 0.0	0.0 0.0	0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	+0.0 +	0.0	0.0 t	0.0 ₊ 0.	0.0 ₊ 0.0 0.0	0.0 + 0.0	¢.0,	0.1	_0.1 0.1	_0.1 _0.1	0.3 ₊ 0.3	0.5 0.6	0.8+0.5	_0.9 0.5	1.0/	₊ 1. 0.		7		
+ ⁰ .0 + ^{0.0}) _0.0	+ ⁺ 0.0	+ ⁺ 0.0	+ _0.0	+ _0.0	0.0	+	+ + 0.0	0.0	+ + + + 0.0 +	0.0	+).0 ₊ 0.	0 ₊ 0.0	+ ⁺ 0.0	+ ⁺ 0.1	+ ⁺ _+0.1	+ ⁺ _+0.1	+ _0.3	+ ⁺ 1.6	+ ⁺ _1.3	+ ⁺ _0.7	+ _0.5	/ _0.4	+ ⁻ +0.				₹ X X
0.0 +0.0) ₊ 0.0	0.0 ₊ 0.0	_0.0	_0.0	_0.0	_ 0.0	0.0	0.0	0.0	+0.0 +	0.0	0.0 ₊ 0.0).0 ₊ 0.	0.0 ₊ 0.0	_0.1 20'-	_0.1 <i>O</i> "AF0	e ^{10,2}	_0.6	2.3 ? 1	₊ 1.9	₊ 1.5	_1.1	+0.7	_0.5	_+ 0 .		Z		
0.0 ₊ 0.0 ₊ 0.0 0.0	0.0 ₊ 0.0 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	+0.0 + 0.0	0.0	0.0 +00 +00 +00 +00 +00 +00 +00 +00 +00).0 ₊ 0.).1 0.	0 ₊ 0.1	+ ^{0.1}	+ ^{0.2}	0.6	2.8	2.8	+ ^{1.9}	+ ^{1.3}	+ ^{1.0}	0.7 + 0.6	+0.4 +0.3	+0. 0.		D		O RO
+ + +0.0 +0.0	+ 0.0	+ 0.0 +	+ _0.0	+ _0.0	+ _0.0	+ _0.1	+ _0.1	+ _0.1	+ _+0.0	+ + +0.0 +	0.0	+ + _0.0 _(+).1 ₊ 0.	+ 1 ₊ 0.1	+ _0.3	+ 1.7/		1.9	+ 1.7	+ _1.5	+ _1.1`	+	+	+/ _0.2	+ _+0.		N		VILD S
0.0 +0.0) ₊ 0.0	0.0 ₊ 0	0.0	_0.0	_0.1	_0.3	_0.4	_+0.2	0.0	_0.0 _	0.0	+0).1 ₊ 0.	2 ₊ 0.2	0.6 ₊	1.3	+1.6	1.4	₊ 1.4	+ ^{1.3}	+1.0	1.0	0.7	_0.3	_+ 0 .		S		OLEV
0.0 ₊ 0.0 ₊ 0.0 ₊ 0.0) _0.0) _0.0	0.0 +0.0	0.0 ₊ 0.0	_0.1 _0.1	_0.3	^{+1.3}	^{+3.5}	_0.6		COMIP I	STORAGE	~~~+().2 0. W2	0.4 ₊ 0.4 ک [°] _0.6	0.5/	0.9	1.3	+ ^{1.4}	+ ^{1.4}	+ ^{1.4}	_1.2 _1.6	1.2 1.6	′ ₊ 1.0 _1.4	_0.4 _0.6	+0.		•••		
+0,0 +0.0	+ 0.0 ₊ 0.0	+ 0.0	+ _0.1	+ _0.0	0.1	+	W1		PACT		9'-6"	AFG	W2	- 	+ <u>1.1</u>	+ + 1.0	+)+ 1.4	+ _1.6	+ _+2.0	+ _2.3	+ 2.3	⁺ 2.0	+ _1.6	+ _0.4	+ _0.				S
+0.0 +0.0	0.0	0 ₊ 0.1	0.1	0.3		L	MN CIN	GEL					EW1	O _∓ 5.9	1.5	+ ^{1.3}	1.5	/ ₊ 1.7	⁺ 2.3	,3.1 ,	3.2	_1.2	_0.2	_0.1	₊ 0.				
0.0 +0.0 0.0 +0.0 0.0 +0.0) ₊ 0.1	0.1	+0.2 +0.2		V2 ,3 0.3	MI					5	19	'-6"AÉ	+1W		+ ¹ .1 _0.8	1.6 + 1.2	,2.0 ,1.5	2.3 0.6	^{+2.6} PP1 ^{+0.2}	$D_{1.2}^{0.7}$	_0.2 `-O "A _0.1	_0.1 FG _0.1	0.0 ₊ 0.0	0. 0.	No.	Des	cription	Date
0.0 ₊ 0.0) ₊ 0,1	+0.1	0.2	_0.1	+0.X					/				V	V2X	D_0.6	_0.5	_0.3	_0.2	, 0.1	_0.1	_0.1	_0.0	0.0	_+ 0 .				
+0.0 +0.0	0.0 ₊ 0.0	0.1	+0.2	+0.1	0.2	0.3	UN					$\langle \rangle$				₊0.5 W2	0.4 ₊ 0.4	+0.3	0.2+0	0.1	+0.1	+0.1	0.0 ₊	0.0 ₊	+0.				
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,	0.0 ₊ 0.0	0 +0.1 0 +0.1	+0.1 +0.1	+0.3	+0.2 +0.2	+1. +0.5	V2 ₽	H-1				34 PAR		ۍ 19′-6″	AFG-).5	+0.4	_0.2 _0.3	+0.1 +0.2	+0.1 +0.1	+0.1 +0.1	0.0 ₊ 0.0	0.0 ₊ 0.0	0. 0.				
0.0 ₊ 0.0 ₊ 0.0	0.0 ₊	0.0 ₊ 0	+0.1	+0.2	+0.2	_+0.2	+0.					SING SPA		\ _		W2	0.4	_0.5	0.3	_0.2	_0.1	_0.1	_0.1	0.0 ₊	0.				
0.0 \ 0.0) <u></u> 0.0	0.0 ₊ 0.0	0.1	+0.1	+0,2	0.1	_0.3 ¹	W		E			[ii		/			W2 ⁵	0.4	0.3	0.2	0.1	0.1	0.0 ₊ 0.0	+0.				
+0.0 +0.0 +0.0 +0.0	, +0.0 , +0.0		+0.0	+0.1 +0.1	+0.2 +0.1	+0.2	+0.2 +0.2	0.3		4	ł				19	'-6"Ai	ĒG-		+ ^{0.0} °	+ ^{0.4}	+0.2 +0.3	+0.1 _0.2	+0.1 +0.1	+ ^{0.1}	+0. +0.				
_0.0 _0.0), ⁺ 0,6	9.0 ₊ 0.0	0.0 ₊	_0.0	+Q.1	+0.2	_0.3	+ ^{0.1}	-0.		12		<u>`</u>	-				vv2	0.3 W	_0.5	_0.3	_0.2	_0.1	_0.1	₊ 0.				
0.0 $_{+}^{0.0}$) ₊ 0,0) _0.0	0.0	0.0	0.0 ₊ 0.0	+0.1	+0.1 0.1	0.2	_0.1	+ ^{0.4}	W2 %	17	þ					19'-6	5"AFG		ð	0.4 0.5	0.3 ₊ 0.3	0.2 ₊ 0.2	_0.1 0.1	0. 0.				
+ + _0.0 _0.0	+ 0.0 ₊ 0.0	0.0 ⁺	+ _+0.0	+ _0.0	+ _0.0	+ _+0.1	+	+0.2	0.1	+ 0.2					- \	/ /		13	, \	N2	${\displaystyle \sum_{_{_{+}}0.5}^{_{_{+}}}}$	+ _0.4	+ _0.2	+ _0.1	+ _0.				
0.0 ₊ 0.0) ₊ 0.0	0.0,	0,0 ⁺	0.0 ₊	_+0.0	_+0.0	+0.1	↓ 0.2	+ ^{0.2}	_0.1 _	0.3	UN PERSONAL PROPERTY OF THE PR		9	•			Tr.	15 16		+ ^{0.3} V	V2 ^{.5}	_0.3	_0.2	_+ 0 .				
0.0 $_{+}^{0.0}$	0.0 ₊ 0.0 0.0	0.0 ₊ 0.0	,0.0 +0.0	0.0	0.0 0.0	0.0 ₊ 0.0	+ ^{0.1}	+0.1 0.1	+0.2 +0.2	0.2 + 0.2	0.3	W2 5	H-A						9'-6",	AFG-	H	₽ <u>5</u> ►►	0.4	0.2+ 0.2	+0. 0.				
+ + +0.0 +0.0	+ 0.0 ₊ 0.0	+ 0.0	+ _0.0	+ _+0.0	+ _+0.0	+ _+0.0	+ _0.0	+ +0.1	+0.1	+0.2 +	0.1	0.1	.5 _1.	7 3.4					K10		W	2 0.2	ر 0.3	+ _0.2	+ _0.				
0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊	_0.0	+ 0 .0	+0.0	0.0 ₊	0.0 ₊	₊ 0.1	+ 0.1 +	0.1	0.3 ₊ 0).5 ₊ 1.	1 _1.6	¥W2	LOBB		834	K15 K18 K	CR	0.0 ₊	_0.1	_0.1	_0.1	₊ 0.				
0.0 ₊ 0.0 ₊ 0.0 ₊ 0.0 ₊ 0.0	0.0 ₊ 0.0 00.0	0.0 ₊ 0.0 0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0+ +0.0	0.0 0.0	0.0 +0.0	0.0 ₊ 0.0	+ ^{0.0}	_0.1 _ _0.0 _	0.1	0.1 _0.1 _0).3 ₊ 0.).2 ₊ 0.	5 [°] ₊ 0.9 3 \ ₊ 0.5		2		M NI N	IT KIB			0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0. 0.				
0.0 +0.0) ₊ 0.0	0.0 ₊ 0.0	0.0	_0.0	_0.0	_+Q.0	0.0 ⁺	0.0	0.0	_0.0 _	0.0	0.1 _().1 ₊ 0.	1 0.2		_0.5	W2	ELEV H	- Jack	121 122		0.1	_0.1	0.0 ₊	_+ 0 .		1. A	DOTICA	$\overline{\mathbf{A}}$
0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊	0.0	0.0 ₊	0.0	+0.0	+0.0	0.0	+0.0 +	0.0	0.0	0.1 ₊ 0.	1 _0.1			10-3-	/2 The w	2 2 2		_0.3 9¦-6 ",	_0.1 AFG	_0.1	0.0 ₊ 0	+0.	9	Con R	N GITA MIL	ET B
0.0 +0.0 +0.0 +0.0	0.0 ₊ 0.0	0.0 ⁺ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	+0.0 +0.0	+0.0 +0.0	0.0 +0.0	+ 0.0 + +0.0 +	0.0	0.0 +0	0.0 +0.	1 ₊ 0.1 1 ₊ 0.1	0.1	0.3 مىل 1 9:5	0 "45@	(-@"AF	+ ^{0.4}	+0.3 +0.2	+0.1 +0.1	+0.1 +0.1	0.0 ₊ 0.0	+0. +0.		R 09	36168 /08/2022	VEER
0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊	0.0 ₊	0.0 ₊	0.0 ₊	0.0	+0.0	,0.0 ⁺	+0.0 +	0.0	, 0.0, _0	0.0 ₊ 0.	Q ₊ 0.1	₊ 0.1	_0.2	+0.2	+0.2	_0.2	_0.2	_0.1	_0.1	0.0 ₊	0.0 ₊	_+ 0 .	6	ALSS.	ONAL EN	
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0.0 ₊ 0.0 ₊ 0.0 ₊ 0.0 ₊ 0.0	, ₊ 0.0	0.0, 0.0, 0.0,	0.0 ₊ 0.0	0.0 ₊ 0.0 ₊	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	, v.y ₊	+ ⁺ 0.0 + +0.0 +	0.0 _0.0	,0.0 ,0).0 +0:).0 +0.	, + ^{0.} ∜ 1 ↓0.2	+0.2 +0.6	+ ^{0.4}	+0:7 +1.6	+ ^{0.1} + ^{2.2}	+0.0	0.0 ₊ 0.0	0.0 ₊	0.0 ₊	0.0 ₊ 0.0	0.0 ₊ 0.0	+0. +0.	Date Proje	e ect Nu	(mber	22049
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0.0 ₊ 0.0 ₊ 0.0) ₊ 0.0	0.0 ₊ 0.0	0.0 ₊	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	0.0 ₊	0.0 ₊	, 0.0 +	0.0	0.0 +0).0 ₊ 0.	1 ₊ 0.1	+0.5	+1.7	+3.4		4.6		0.0 +0.0	0.0 ₊	0.0 ₊ 0.0	0.0 ₊	+0.	Shee Title:	:†		
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+0.0 +0.0 +0.0 +0.0	, ₊ 0.0	0.0 ⁺ 0.0	0.0 ₊ 0.0	0.0 ₊ 0.0	+ ^{0.0}	+ ^{0.0}	+ ^{0.0}	0.0 ₊ 0.0	+ ^{0.0}	+ ⁺ 0.0 +	0.0	,0.0 ,0	p.0 +0.	0.0 ₊ 0.0 ₊	0.0 ₊ 0.0	+0.0	0.0	+ ^{0.0}	+ ^{0.0}	+ ^{0.0}	+ ^{0.0}	+ ^{0.0}	+ ^{0.0}	+ ^{0.0}	+ ⁻ .	 	<u>/</u> [っつ
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Cylinder 7" 1 Light Wall Light Black

SPECIFICATIONS W2	
Certifications/Qualifications	
Dark Sky Compliant	Yes www.kichler.com/warranty
Dimensions	
Base Backplate Extension Weight Height from center of Wall opening (Spec Sheet) Height Width	5.00 × 4.75 7.00" 0.95 LBS 3.50" 7.00" 4.75"
Light Source	
Lamp Included Lamp Type Light Source Max or Nominal Watt # of Bulbs/LED Modules Socket Type Socket Wire	Not Included BR30 Incandescent 65W 1 Medium 150"
Mounting/Installation	
Interior/Exterior Location Rating Mounting Style Mounting Weight	Exterior Wet Wall Mount 0.95 LBS
FIXTURE ATTRIBUTES	
Housing	
Primary Material	ALUMINUM
Product/Ordering Information	
SKU Finish Style UPC	9234BK Black Contemporary 783927536783
Finish Options	
Architectural Bronze	
Black	
Brushed Aluminum	
White	

Kichler.com

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U2	Catalog
r.	Catalog
	A.F
	Number

Notes	
Type W1	
the Tab key or mouse over the page to see all interactive elements	

Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC1 delivers up to 3,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of ARC1, with its integrated emergency battery backup option, is ideal for over-the-door applications.

ARC LED Fa	mily Overview											
Lumination	Canada ad Phil 1997	C-14 FM - 20%	Approximate Lumens (4000K)									
Luminaire	Standard EM, 0°C	COIG EM, -20 C	P1	P2	P3	P4	P5					
ARC1 LED	4W		1,500	2,000	3,000	-	8 70					
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500					

D1 _____

ARC1 LED

CERTIFIED IN TITLE **20** Number 1 day

Architectural Wall Luminaire

ing l	Information			EXAMPLE: ARC1 L	ED P2 40K MVOLT PE DDBXD
	Package	Color Temperature	Voltage	Options	Finish

ARC1 LED	P1 P2 P3	1,500 Lumens 2,000 Lumens 3,000 Lumens	30K 40K 50K	3000K 4000K 5000K	MVOLT 3471	E4WH PE DMG SPD6KV FAO	Emergency battery backup, CEC compliant (4W, 0°C min) ¹ Button type photocell for dusk-to-dawn operation 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) ² 6kV surge protection Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100% ²	DDBXD DBLXD DNAXD DWHXD DSSXD DDBTXD DBLBXD DNATXD DWHGXD DSSTXD	Dark bronze Black Natural aluminum White Sandstone Textured dark bronze Textured dark bronze Textured black Textured natural aluminum Textured white Textured sandstone
	Ac	cessories and shipped separately				,		1.00	NOTES 1 347V not available with E4WH.
WSBBW DDBXD U	Surface -	mounted back box (speci	fy finish)						2 FAC not available with Divid.

1

Specifications

6.5"

4.75"

11"

7 lbs

Depth (D1):

Depth (D2):

Weight: (without options)

Height:

Width:

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EXTERIOR LUMINAIRE SCHEDULE						
KEY	LAMP	DESCRIPTION	CEIL'G (DEPTH)	MANUFACTURER/#	VOLT	
PPI	LED 3000K 106W 6327LM	D-SERIES AREA LUMINAIRE, POLE MOUNT, UNIVERSAL SQUARE POLE MOUNTING ADAPTOR, TYPE T4M OPTIC, O-10V DIMMING, COORDINATE FINISH WITH ACRHITECT, DARK SKY COMPLIANT WITH HOUSE-SIDE SHIELD	POLE (HT = REFER TO SITE PLAN)	LITHONIA LIGHTING DSX1-LED-P1-30K-T4M-MVOLT-HS	MVOLT	
D1	LED 3000K 10.5W 1000LM	6" DIAMETER LED DOWNLIGHT, 0-10V DIMMING, COORDINATE FINISH WITH ARCHITECT, DARK SKY COMPLIANT	RECESSED	LITHONIA LIGHTING LDN6CYL 30/10 LO6AR LSS	MVOLT	
W1	LED 3000K 11W 1500LM	WALL MOUNTED LUMINAIRE, 0-10V DIMMING, COORDINATE FINISH WITH ARCHITECT, DARK SKY COMPLIANT	WALL (HT = 9'-6" AFG)	LITHONIA LIGHTING ARC1LED-P1-30K-MVOLT	MVOLT	
W2	LED 3000K 9W 800LM	5" DIAMETER WALL-MOUNTED LED CYLINDER DOWNLIGHT, WET LOCATION LISTED. PROVIDE COMPATIBLE LED E26 BULB. DARK SKY COMPLIANT	WALL (HT = 8'-6" AFG)	KICHLER LIGHTING 9234BK	MVOLT	
WЗ	LED 3000K 73.2W 5752LM	D-SERIES WALL LUMINAIRE, 2 LED LIGHT ENGINES, TYPE TFTM OPTIC, 3000K @ 1000mA, 0-10V DIMMING, COORDINATE FINISH WITH ARCHITECT, DARK SKY COMPLIANT	WALL (HT = REFER TO SITE PLAN)	LITHONIA LIGHTING DSXW1 LED 20C 1000 30K TFTM MVOLT HS	MVOLT	
NOTES: *NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN MODEL NUMBERS AND DESCRIPTIONS PRIOR TO ORDERING *VERIFY CEILING INSULATION W/ GC AND NOTIFY ENGINEER OF ANY IC RATING CONFLICTS PRIOR TO ORDERING						

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Catalog **D-Series Size 1 boulder** Number LED Area Luminaire • engineering plumbing, mechanical PP1 and electrical d"series 1717 15th Street Boulder, CO 80302 **Buy American** Introduction 303.444.6038 phone The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive Specifications 303.442.1172 fax 1.01 ft² statement even as it blends seamlessly with its staff@boulderengineering.com EPA: (0.09 m² environment. The D-Series distills the benefits of the latest in LED technology into a high Length: performance, high efficacy, long-life luminaire. Width: The outstanding photometric performance 7-1/2" (19.0 cm) results in sites with excellent uniformity, greater Height H1: H2 pole spacing and lower power density. It is 3-1/2" Height H2: ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with Weight (max): 27 lbs (12.2 kg) typical energy savings of 65% and expected service life of over 100,000 hours. CO 80482 **IDLEWILD** EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD DSX1 LED SOJOURN AT IDLEWILD IDLEWILD ROAD, WINTER PARK, DSX1 LED 30K 3000 K Forward optics T1S Type | short T5VS Type V very short³ MVOLT 5 Shipped included P1 P4¹ P7¹ 40K 4000 K (Automotive) XVOLT TSS Type V short³ Square pole mounting SPA (277V-480V) 6,7,8 T2S Type II short P2 P51 P8 50K 5000 K TSM Type V medium 3 Round pole mounting 10 RPA T2M Type II medium T5W Type V wide³ 120 ⁹ P3 P61 P91 WBA Wall bracket³ T3S Type III short BLC Backlight control 4 208 9 Square pole universal mounting adaptor 11 **Rotated optics** SPUMBA T3M Type III medium LCCO Left corner cutoff⁴ 240 ⁹ RPUMBA Round pole universal mounting adaptor 9 P10² P12² T4M Type IV medium RCCO Right corner cutoff 4 277 9 P11² P13^{1,2} Shipped separately 4 347 9 TFTM Forward throw KMA8 DDBXD U Mast arm mounting bracket adaptor 480 9 medium (specify finish) 12 OURN PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc 20,21 DDBXD Dark bronze Shipped installed Shipped installed NLTAIR2 nLight AIR generation 2 enabled ¹³ HS House-side shield ²³ DBLXD Black High/low, motion/ambient sensor, 15–30' mounting height, ambient sensor enabled at 5fc^{70,21} SF Single fuse (120, 277, 347V) ⁹ DNAXD Natural aluminum PIRH PIRHN Network, high/low motion/ambient sensor 14 PER NEMA twist-lock receptacle only (controls ordered separate) 15 DF Double fuse (208, 240, 480V) 9 DWHXD White PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, DDBTXD Textured dark bronze PER5 Five-pin receptacle only (controls ordered separate) 15,16 L90 Left rotated optics 2 ambient sensor enabled at 1fc 20,21 Seven-pin receptacle only (controls ordered separate) 15,16 PIRH1FC3V Bi-level, motion/ambient sensor, 15–30' mounting height, DBLBXD Textured black PER7 R90 Right rotated optics 2 0 ambient sensor enabled at 1fc 20.2 DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹⁷ DNATXD Textured natural HA 50°C ambient operations¹ FAO Field adjustable output 20,21 BAA Buy America(n) Act Compliant aluminum Dual switching 18,19,20 DWHGXD Textured white Shipped separately S BS Bird spikes 24 EGS External glare shield SKI DSX1-LED LITHONIA LIGHTING One Lithonia Way • Convers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com Rev. 07/19/21 © 2011-2021 Acuity Brands Lighting, Inc. All rights reserved. No. Description Date Page 1 of 8 COMMERCIAL OUTDOOR D-Series Size 1 LED Wall Luminaire Notes WЗ NIGHTTIME FRIENDLY **Buy American** d"series Introduction Specifications The D-Series Wall luminaire is a stylish, fully Back Box (BBW, E20WC) Luminaire integrated LED solution for building-mount 13-3/4" BBW Width: ^{13-3/4"} Weight: 5 lbs applications. It features a sleek, modern design 12 lb Width: (34.9 cm) (34.9 cm) Weight: (2.3 kg) and is carefully engineered to provide long-lasting, 10" 4" **E20WC** 10 lbs (4.5 kg) Depth: Depth: energy-efficient lighting with a variety of optical (10.2 cm) Weight: (25.4 cm) 6-3/8" (16.2 cm) and control options for customized performance. 6-3/8" Height: Height: (16.2 cm) With an expected service life of over 20 years of _____w____ - D nighttime use and up to 74% in energy savings - D -over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance For 3/4" NPT side-entry ____w____ lighting solution that produces sites that are conduit (BBW only) exceptionally illuminated. **Ordering Information** EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD DSXW1 LED DSXW1 LED 10C 10 LEDs 350 350 mA (one engine) 530 530 mA 700 700 mA 30K 3000 K T2S Type II Short MVOLT² Shipped included Shipped installed PE Photoelectric cell, button type 6 40K 4000 K T2M Type II Medium 120 ³ (blank) Surface mounting bracket DMG 0-10v dimming wires pulled outside fixture (for 700 700 mA 50K 5000 K T3S Type III Short 208 3 20C 20 LEDs use with an external control, ordered separately) 1000 1000 mA (1 A) ¹ AMBPC Amber T3M Type III Medium 240 ³ (two engines) ¹ man BBW Surfacephosphor converted T4M Type IV Medium 277 ³ TFTM Forward Throw 347 ^{3,4} PIR 180° motion/ambient light sensor, <15' mtg ht 1.7 mounted back box PIRH 180° motion/ambient light sensor, 15-30' mtg ht ^{1,7} Medium 480 3,4 entry) 5 PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc 1.7 36168 E20WC Emergency battery backup (includes external component enclosure), CA Title 20 compliant 89 09/08/2022 PERMIT SET Issue DDBXD Dark bronze DSSXD Sandstone DWHGXD Textured white Shipped installed Shipped separately " SF Single fuse (120, 277 or 347V) ^{3.10} BSW Bird-deterrent spikes DBLXD Black DDBTXD Textured dark bronze DSSTXD Textured sandstone 09.08.2022 Date DF Double fuse (208, 240 or 480V) 3.10 VG Vandal guard DNAXD Natural aluminum DBLBXD Textured black DDL Diffused drop lens DWHXD White DNATXD Textured natural aluminum HS House-side shield 11 22049 Project Number SPD Separate surge protection ¹² MOD Drawn by NOTES Accessories ΕM Checked by 1 20C 1000 is not available with PIR, PIRH, PIR1FC3V or PIRH1FC3V. Ordered and shipped separately. 2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Sheet 3 Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option. DSXWHS U House-side shield (one per 4 Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH. Title: 5 Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory. DSXWBSW U Bird-deterrent spikes 6 Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH). PHOTOMETRIC DSXW1VG U Vandal guard accessory 7 Reference Motion Sensor table on page 3. 8 Same as old ELCW. Cold weather (20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.inhonia.com DETAILS AND 9 Not available with SPD. 10 Not available with E20WC. 11 Also available as a separate accessory; see Accessories information. SCHEDULES 12 Not available with E20WC. Sheet Number LITHONIA LIGHTING One Lithonia Way • Convers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com DSXW1-LED © 2013-2022 Acuity Brands Lighting, Inc. All rights reserved. Rev. 3/07/22

ARC1 LED

Rev. 03/02/22

MEMO

то	Planning Commission

FROM Hugh Bell, Planner

THROUGH James Shockey, AICP, Community Development Director

DATE March 12, 2024

RE Minor Site Plan – 101 and 103 (Lots 1 and 2) and 105 and 107 (Lots 3 and 4) Atlas Circle –

Retreat at Atlas Subdivision (PLN24-017)

Property Owner: 115 Reiling, LLC

Applicant: Todd Goulding of Goulding Development Advisors, LLC

Architect: MA Studios

Legal Description: Lots 1-4, Retreat at Atlas Subdivision (Reception No. 2021012782) (the "Property").

Zoning: R-2 (Multiple Family Residential).

Authority:

Pursuant to § 5-B-3 of the Winter Park Unified Development Code (the "UDC"), the Planning Commission considers building configurations, colors, materials and general compatibility of proposed structures and outdoor advertising within the Town of Winter Park. Minor Site Plan approval is required before building permit issuance.

Variances:

No Board of Adjustment (BOA) or Administrative Variance Requests are included with the application.

Architecture:

Two (2) new townhouse buildings, Buildings A and B. Both Buildings A and B each contain two (2) dwelling units ("DU"). Each DU contains a tandem parking space garage.

Title Commitment:

Satisfactory.

Homeowner's Association Review:

Satisfactory. The HOA provided approval in a letter dated February 13, 2024.

Density:

Satisfactory. 20 DU/acre are permitted for Townhouse uses. Density was approved with the Final Plat (PLN21-075).

Minimum Lot Dimensions:

Satisfactory. Per Table 3-A-3, Residential Lot and Building Standards, a Townhouse in the R-2 district is held to the following standards:

Required minimum area per DU: 1,300 sqft Provided minimum area per DU: 1,103 sqft

Required minimum lot width: 20' Provided minimum lot width: Lot 1:12.67' Lot 2: 12.67' Lot 3: 12.95' Lot 4: 12.78'

Required minimum lot depth: None Provided minimum lot depth: N/A

The lot dimensions were approved via the Final Plat, which is still valid as it complies with Table 5-B-13, Time Limitations, as the water and sewer infrastructure was completed when this was Snow Creek Townhomes (the previous platted development). The Final Plat was approved under the land use code prior to the UDC.

Material and Color:

Partially satisfactory. The stone is colored white, which staff believes contradicts Guideline 3.8.2 from the Design Guidelines, which suggests "incorporat[ing] materials with natural (earth) tones and muted colors". There are nineteen (19) future DU which will use the same materials. Staff wants the Commissioners to discuss this and is adding this under "Planning Commission Items for Discussion" below.

Outdoor Lighting:

Partially satisfactory. One (1) fixture is proposed and it contains the International Dark Sky Association (IDA) approval stamp (UDC, § 3-K-3(A)(1)). The fixture's spec sheet does not show the stamp but the IDA website does. Single-family properties, including multiple residential properties not having common areas, are limited to 5,100 lumens and each fixture shall not exceed 850 lumens. Given there are decks with overhangs proposed, Applicant shall clarify if any outdoor soffit lighting is proposed.

Photometric plans are not required for single-family attached or detached DU but the Applicant submitted one.

Fixture Name	Proposed # of Fixtures	Proposed Lumens per Fixture	Proposed CCT
Sodor Outdoor Wall Sconce	BLD A: 6 (3 per DU) BLD B: 6 (3 per DU)	330 (990 total per DU)	3000K
		Total = 3,960 lumens	

> Applicant shall clarify if any outdoor soffit lighting is proposed.

Accessory Dwelling Unit (ADU):

N/A. No ADUs are proposed.

Site Plan:

Satisfactory.

Floorplans:

Satisfactory.

Building Elevations:

Unsatisfactory. See under "Planning Commission Items for Discussion" below.

Setbacks:

Satisfactory. The setbacks were determined with the Final Plat via Plat Note No. 8:

8.) BUILDING SETBACKS ARE AS FOLLOWS: FRONT= 25'; SIDE= 14'; REAR= 20'

Setbacks comply.

Building Coverage:

Unsatisfactory. Overall building coverage (for all proposed buildings and impervious surfaces) is 42.6%. Townhouses are limited to 40% in the R-2 district. Applicant states building coverage is 25.01% (see Site Plan) and it is unclear how they came to this calculation. Staff is comfortable reviewing revised versions administratively. Building coverage was compliant at time of Final Plat.

> Applicant shall revise Site Plan to show building coverage not exceeding 40%.

Building Height:

Satisfactory. Maximum midpoint building height is limited to 35' (34.44' proposed for Building A and 34.91' for Building B) and maximum overall building height is limited to 42' (36.0' proposed for Building A and 42.0' for Building B).

Parking:

Satisfactory. Townhouse uses with two or more bedrooms are required to provide at least two (2) offstreet parking spaces. Each DU provides two tandem spaces in the garage. Lots 1 and 2's driveways meet the minimum required 20' length to provide one (1) space in the driveway. Parking is permitted on the driveways.

Off-Street Parking Requirements						
Use	Standard	# DU/# Bedrooms (br)/Sq. Ft.	Parking Required	Parking Provided		
SFA (townhome/duplex)	1 space per 1br 1.5 spaces per 2br 2 spaces per 2+br	4 2+br DU	8	10		

Bufferyards and Revegetation:

Partially satisfactory. The bufferyards are subject to the following standards:

- North lot line: Adjacent to R-1; Type A (given this is a townhouse use as seen in Table Note 1 from Table 3-I-5-2, District Bufferyard Standards).
- South lot line: Adjacent to R-2; Type A
- East lot line: Adjacent to local road (Kings Crossing Road); Type C
- West lot line: Adjacent to R-2; Type A

No fencing is proposed for the DU. The Landscaping Plan dated 2/27/2024 has the east lot line showing a Type A bufferyard where Type C is required.

- Applicant shall revise east lot line bufferyard to show a Type C bufferyard on the Landscaping Plan.
- Any disturbed areas on the site shall be revegetated with the seed mix recommended by the Grand County Natural Resource Conservation Service, which mix composition is described in Section 7.4 of the Standards and Specifications for Design and Construction.

Snow Storage:

Satisfactory. 5,509 sqft of snow storage are provided and 4,099 sqft are required. UDC, § 3-H-5, Parking Design Standards requires that a minimum of 25% of all driving surfaces, including gravel shoulders, parking areas, and pedestrian walkways is designated for snow storage. The driveway and walkways comprise 16,399 sqft.

Erosion Control / Drainage Plan / Drainage Report / Grading / Engineer Review:

TBD. The Town Engineer is reviewing the Grading and Drainage Plan and staff will forward comments when they arrive.

- Should the Town Engineer have comments, Applicant shall revise Grading and Drainage Plan accordingly.
- Approved drainage and erosion control shall be in place prior to and throughout site preparation and construction and through successful revegetation.

Driveway:

Unsatisfactory. The following driveways exceed a 5% slope, which is the maximum slope permitted for the first 24' of a driveway per Section 4.4, Alignment, in the Standards:

- Lot 1 (Building A): 5.82%
- Lot 3 (Building B): 7.29%
- Lot 4 (Building B): 10.03%

An Administrative Variance Request must be submitted for the Town Engineer's review as seen in the Standards, Section 8.1, Variances.

- Applicant shall submit an Administrative Variance Request for the Town Engineer's review as seen in the Standards, Section 8.1, Variances.
- > A stabilized construction entrance shall be installed prior to ground disturbance.

Access:

Satisfactory. All DU are accessed via Atlas Circle, a private ROW. Accesses were approved by the Town Engineer during the Final Plat review process.

Utility Review:

N/A. The utility companies already reviewed and approved utility layouts during the Final Plat process.

Wetlands:

N/A. No wetlands exist on site.

Pre-Disturbance Inspection:

N/A. Overlot grading is occurring for the entire subdivision.

Planning Commission Items for Discussion:

 The stone is colored white, which staff believes contradicts Guideline 3.8.2 from the Design Guidelines, which suggests "incorporat[ing] materials with natural (earth) tones and muted colors". There are nineteen (19) future DU which will use the same materials. Should the white stone color be permitted?

Staff Recommendation:

Staff recommends the Planning Commission approve the Minor Site Plan – 101 and 103 (Lots 1 and 2) and 105 and 107 (Lots 3 and 4) Atlas Circle – Retreat at Atlas Subdivision (PLN24-017) with the following conditions:

- 1. Applicant shall clarify if any outdoor soffit lighting is proposed.
- 2. Applicant shall revise Site Plan to show building coverage not exceeding 40%.
- 3. Applicant shall revise east lot line bufferyard to show a Type C bufferyard on the Landscaping Plan.

- 4. Any disturbed areas on the site shall be revegetated with the seed mix recommended by the Grand County Natural Resource Conservation Service, which mix composition is described in Section 7.4 of the Standards and Specifications for Design and Construction.
- 5. Should the Town Engineer have comments, Applicant shall revise Grading and Drainage Plan accordingly.
- 6. Approved drainage and erosion control shall be in place prior to and throughout site preparation and construction and through successful revegetation.
- 7. Applicant shall submit an Administrative Variance Request for the Town Engineer's review as seen in the Standards, Section 8.1, Variances.
- 8. A stabilized construction entrance shall be installed prior to ground disturbance.

Required Permits:

- ✓ Building Permit
- ✓ Driveway Permit
- ✓ SFD/Duplex Deposit Agreement

Physical Address: 315 East Agate Avenue Granby, CO 80446

Mailing Address: PO Box 21 Granby, CO 80446

Phone: 970.887.9366 Fax: 970.887.0383 E-mail: christopher @maarchitectural.com

PROJECT NARRATIVE

Project:

The Retreat at Atlas, Winter Park

Address:

101-107 Atlas Circle, Winter Park, CO 80482

Owner:

115 Reiling, LLC PO Box 5148, Dillon, CO 80443 lei@thebivvy.com 484.661.9848

Applicant:

Todd Goulding/Goulding Development Advisors, LLC 220 Gold Dust Drive, Edwards, CO 81632 tgoulding@gda-co.com 970.331.1732

HOA:

N/A

Project Manager:

PG Arnold PO Box 1173, Winter Park, CO 80482 thomas.elliot@pgarnold.com 970.977.9843

Architect:

MA Studios PO Box 21, Granby, CO 80446 christopher@maarchitectural.com 970.887.9366

Civil/Structural Engineer:

Anthony Krempin/Top Knot Civil Structural Engineering 129 E. Byers Ave., Hot Sulfur Springs, CO 80451 tony@tkcse.com 970.531.2860

Surveyor:

CORE Consultants, Inc. 3473 S. Broadway, Englewood, CO 80113 dberglund@liveyourcore.com 303.703.4444

Land Planner:

Anthony Krempin, see above.

Legal Description:

Sec. 33, T1S, R75W, 6th PM, Town of Winter Park, County of Grand, State of Colorado

Zoning District: R-2

Lot Size: Lots 1-4: 0.104 acre, 6,098.4 square feet

All Proposed Uses: Multi-family Residential


Physical Address: 315 East Agate Avenue Granby, CO 80446

Mailing Address: PO Box 21 Granby, CO 80446

Phone: 970.887.9366 Fax: 970.887.0383 E-mail: christopher @maarchitectural.com

Number of Dwelling Units:

4 (Building A: 2 units, Building B: 2 units)

Number of Bedrooms per Dwelling Unit:

4 bedrooms per unit

Size of Residential Space:

Building A (2 units): Livable: 3,734 square feet Gross: 4,914 square feet

Building B (2 units): Livable: 4,188 square feet Gross: 6,266 square feet

Number of Proposed Off-Street Parking Spaces:

Building A (2 units):

Lot 1: 2 spaces inside garage, 1 space in driveway Lot 2: 2 spaces inside garage, 1 space in driveway

Building B (2 units):

Lot 3: 2 spaces inside garage, 1 space in driveway Lot 4: 2 spaces inside garage, 1 space in driveway

Construction Schedule:

TBD. Would like to break ground in June if possible.

Bufferyard Tabulation

Tabulation of required bufferyard types per property line and list of proposed plantings proposed per property line. See Sec. 3-I-5, *Bufferyards,* for requirements.

	Evergreen Trees Required	Evergreen Trees Provided	Deciduous Trees Required	Deciduous Trees Provided	Shrubs Required	Shrubs Provided	Berm Height	Deficiency (if any)
N Boundary								
Length: <u>293.53</u> linear feet Adjacent properties are zoned: R-1	6	7	6	8	N/A	N/A	N/A	
Bufferyard Type: $(A) B C D$ (circle one)								
S Boundary								
Length: <u>139.37</u> linear feet	4	6	4	4	N/A	N/A	N/A	
Adjacent properties are zoned: <u>R-2</u>	-	Ũ	-	•				
Bufferyard Type: (A) B C D (circle one)								
Length: 476.06 linear feet								
Adjacent properties are zoned: R-2	10	12	10	10	N/A	N/A	N/A	
Bufferyard Type: (A) B C D (circle one)								
W Boundary								
Length: <u>404.59</u> linear feet	10	12	10	10	Ν/Δ	Ν/Δ	Ν/Δ	
Adjacent properties are zoned: <u>R-2</u>		12	10				11/7	
Bufferyard Type: (A) B C D (circle one)								

Outdoor Lighting Tabulation

See Article 3.K, *Outdoor Lighting,* for requirements. Ensure each fixture's cut sheet contains the International Dark Sky Association (IDA) Approval Symbol.

Fixture Name	Proposed # of Fixtures	Proposed Lumens per Fixture	Proposed Correlated Color Temperature (in degrees Kelvin)
Sodor Outdoor Wall Sconce 3000K	12	750	3000K

10



NOTE: 3D PERSPECTIVES ARE FOR REFERENCE ONLY. SEE ARCH DRAWINGS FOR MORE DETAILED INFORMATION.



315 EAST AGATE AVENUE GRANBY, CO 80446 970-887-9366 MAARCHITECTURAL.COM

ATLAS AT 6TH P.M. RETREAT '5W, 6 /, CO 240 REILING Ŕ Z N # ROJECT Щ ന് RAND S ISSUANCE : DATE :



SHEET TITLE : EXTERIOR RENDERINGS

SHEET NUMBER :

A5.20

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SHEET TITLE : EXTERIOR RENDERINGS

SHEET NUMBER :

A5.21

NOTE: 3D PERSPECTIVES ARE FOR REFERENCE ONLY. SEE ARCH DRAWINGS FOR MORE DETAILED INFORMATION.



Horizontal Siding (SDG-1) Mfr: LP Smartside Collection: Colorstrand Deep Grain Collection Finish: Teton



Vertical Siding (SDG-2) Mfr: LP Smartside Collection: Colorstrand Smooth Siding Finish: Gray Wolf



Metal Panel Siding (MP-2) Mfr: Recla Metals Product: Second Skin Finish: Matte Black



Stone (STN-1) Mfr: Coronado Stone Products Series: Ledgestone Series Product: Pro-Ledge Finish: White



Standing Seam Metal Roof (MP-1) Mfr: Recla Metals Product: Antique Silver Skin Finish: Natural



Timberwork Stain (WTR- ...) Mfr: Behr Product Type: Semi-transparent Stain Finish: Chocolate







Retreat at Atlas 101-125 Snow Creek Cir, Winter Park, CO 80482 WР The





Rooftop Beams Stain (Flat Units) / Rooftop Deck Slats & Soffits Stain (All Units) Mfr: Behr Product Type: Semi-transparent Stain

Exterior Entry Doors Mfr: JELD-WEN Product Type: Model 'W15H' IWP Wood Exterior Door Finish: Walnut Clear Stain

Window/Door /Corner Trim (WTR- ...) Mfr: LP Smartside Product: Trim & Fascia Finish: Cavern Steel



Decking (CDG-1) Mfr: Trex Collection: Transcend Finish: Coastal Bluff



Snow Fence (SNF-1) Supplier: Rocky Mountain Snow Guards, Inc Series: S-5! Blizzard II Fence-Style Guard Bracket and Aluminum Tubing with Swaged End









KEY SHEE	N GLOSS RANGE
A FLAT	BELOW 15
B EGG C SEMI	SHELL 15 TO 20 -GLOSS 30 TO 65
D GLO	SS OVER 65
PAINTING	
PT-100	SHERWIN-WILLIAMS - SIMPLE WHITE (SW7021), (TYP INTERIORS, UON)
(FINAL COLC ARCHITECT F	DR SELECTION AND ACCENT WALLS TO BE FIELD VERIFIED WITH OWNER AND PRIOR TO BEGINNING WORK)
CARPEI	
CPI-I	PRODUCT: ORCHID VALLEY
	FINISH: UT
<u>TILE</u>	
T-1	MFR: PORCELANOSA
	FINISH: GRAPHITE
T-2	MFR: DALTILE COLLECTION: COLORBODY PORCELAIN
	PRODUCT: MARBLE ATTACHE LAVISH FINISH: 24" x 48", MATTE IN THE COLOR "GOLDEN REVERIE MA71"
T-3	MFR: DALTILE
	COLLECTION: GLAZED PORCELAIN PRODUCT: LINDEN POINT
	FINISH: 12" x 24", MATTE IN THE COLOR "GRIGIO LP21"
T-4	MFR: DALTILE COLLECTION: GLAZED CERAMIC
	PRODUCT: RETROSPACE FINISH: 3" x 6", GLOSSY IN THE COLOR "MODERN WHITE RS30"
T-5	MFR: DALTILE
	COLLECTION: GLAZED CERAMIC PRODUCT: COLOR WHEEL COLLECTION - LINEAR
т /	FINISH: 2 178" X 8 9716", LIGHT POLISHED IN THE COLOR "ARCTIC WHITE UT9
1-0	COLLECTION: PTS (PROFESSIONAL TILE SOLUTIONS)
	FINISH: 8x10, HEXAGON IN THE COLOR "BLACK P011"
T-7	MFR: DALTILE
	PODUCT: COLOR WHEEL COLLECTION - LINEAR FINISH: 2 1/8" x 8 9/16", LIGHT POLISHED IN THE COLOR "BLACK K111"
<u>CAST-IN-PLA</u>	<u>CE CONCRETE</u>
CONC-1	SMOOTH FINISH CIP CONCRETE, SEALED
CONC-2	POLISHED FINISH CIP CONCRETE
CONC-3	SMOOTH FINISH CIP CONCRETE, STAINED AND SEALED
CONC-4	EXTERIOR BROOM FINISH CIP CONCRETE, SEALED
CONC-5	SMOOTH FINISH CIP CONCRETE, EPOXY SEALED
CONC-6	EXPOSED ARCHITECTURAL CONCRETE, SEALED
<u>COMPOSITE</u>	DECKING (EXTERIOR FLOORING)
CDG-1	MFR: TREX (OR APPROVED EQUIVALENT) PRODUCT: 1" TRANSCEND BRAND COMPOSITE DECKING W/ GROOVED
	EDGE AND CONCEALED FASTENERS FINISH: "COASTAL BLUFF"
CASEWORK	
CSW-1	MFR: ARISTOKRAFT CABINETRY PRODUCT: WINSTEAD DOOR STYLE W/ SQUARE SHAPE
0000	FINISH: BIRCH W/ "NATURAL" FINISH OR PAINTED WHITE
CSW-2	MFR: WILSONART COLLECTION: CABINET DOORS AND DRAWER FRONTS
	FRODUCT: WIDE SHAKER, 3" SHAKER DRAWER / DOOR (4544) FINISH: LINEN (D427-60) OR WHITE RIVER FOREST (8227K-79)
ADDITIONAL	OPTION MER: WILSONART
~JVV ⁻ Z	COLLECTION: CABINET DOORS AND DRAWER FRONTS PRODUCT: SI AB
	FINISH: LINEN (D427-60) OR WHITE RIVER FOREST (8227K-79)
<u>CO</u> UNTERTO	PS_
CNT-1	MFR: WILSONART
	COLLECTION: QUARTZ COUNTERTOPS AND SURFACES FINISH: SERENE (Q1001) OR VESUVIUS (Q1017)
ADDITIONAL	OPTION
CNT-1	MFR: WILSONART PRODUCT: QUARTZ COUNTERTOPS AND SURFACES
	FINISH: CALACATTA PASTINO (Q4058)
<u>GLAZING</u>	
EGL-1	
	FRODUCT: T INSULATED EXTERIOR GLASS FINISH: "BLACK" W/ CLEAR ANODIZED SPACER
EGL-2	
	FRODUCT: T TINSULATED EXTERIOR GLASS, FROSTED FINISH: "BLACK" W/ CLEAR ANODIZED SPACER
GYDSHN# \A/A	
GYP-1	
~ 11 [−] 1	PRODUCT: 1/2" SHEETROCK BRAND GYPSUM WALL BOARD PANELS FINISH: REFER TO FINISH SCHEDULE / INTERIOR FLEVATIONS

BOARD PANELS

FINISH: REFER TO FINISH SCHEDULE / INTERIOR ELEVATIONS

(MOLD AND MILDEW RESISTANT) FINISH: REFER TO FINISH SCHEDULE / INTERIO GYP-4 MFR: USG (OR APPROVED EQUIVALENT) PRODUCT: 1/2" FIBERROCK BRAND AR (ABUS WALL BOARD PANELS FINISH: REFER TO FINISH SCHEDULE / INTERIO METAL PANEL MP-1 MFR: RECLA METALS PRODUCT: 1" STANDING SEAM PROFILE PANE W/ CONCEALED FASTENERS FINISH: 24 GA "ANTIQUE SILVER SKIN" NATUR MP-2 MFR: RECLA METALS PRODUCT: 1" VERTICAL STANDING SEAM PRODUCT: 1" TYPICAL) W/ CONCEALED FASTER FINISH: 24 GA "SECOND SKIN" IN THE COLOR RAILING (EXTERIOR) RA-1 MFR: TBD FINISH: TO MATCH 'MP-2' <u>SIDING (EXTERIOR)</u> SDG-1 MFR: LP SMARTSIDE PRODUCT: COLORSTRAND DEEP GRAIN COL FINISH: 1X6, HORIZONTAL, IN THE FINISH "TETC SDG-2 MFR: LP SMARTSIDE PRODUCT: SMOOTH SIDING FINISH: 1X6, VERTICAL, IN THE FINISH "GRAY \ SNOW FENCE SNF-1 MFR: ROCKY MOUNTAIN SNOW GUARDS, INC PRODUCT: S-5! BLIZZARD II FENCE-STYLE GUA TUBING WITH SWAGED END FINISH: POWDER COAT (RAL 7030 "STEINGRAU <u>Stone</u> STN-1 MFR: TELLURIDE STONE PRODUCT: LIMESTONE FINISH: COTTONWOOD WALL BASE WB-1 MFR: PRODUCT: 1X6 PRIMED MDF BOARD FINISH: PAINTED (COLOR TO BE CHOSEN BY (WOOD FLOORING WF -1 MFR: KAHRS PRODUCT: MULTI LAYER WOOD FLOORING FINISH: OAK OLAF WOOD TRIM & TIMBER ACCENTS (EXTERIOR) WTR-1 MFR: LP SMARTSIDE PRODUCT: 2X6 CORNER TRIM FINISH: TEXTURED IN THE FINISH "CAVERN STEE WTR-2 MFR: LP SMARTSIDE PRODUCT: 1X4 EXTERIOR-GRADE WINDOW 8 2X4 HEADER TRIM FINISH: TEXTURED IN THE FINISH "CAVERN STEE WTR-3 MFR: PRODUCT: BUILT-UP FASCIA WITH EXTERIOR-WRAPPED WITH METAL FINISH: MATCH WINDOW SASH COLOR (BLAC WTR-4 MFR: PRODUCT: 6X8 EXTERIOR-GRADE ANGLE BRA BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-5 MFR: PRODUCT: 6X16 EXTERIOR-GRADE BEAMS, CE TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-6 MFR: PRODUCT: 1X6 EXTERIOR-GRADE TONGUE AN FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-7 MFR: PRODUCT: 6X6 EXTERIOR-GRADE COLUMN, 0 TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-8 MFR: PRODUCT: 4X12 EXTERIOR-GRADE BEAMS, C TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-9 MFR: LP SMARTSIDE PRODUCT: 2X6 TRIM FINISH: TEXTURED IN THE FINISH "CAVERN STEE WTR-10 MFR: PRODUCT: 3/4" BULLNOSE PARTICLE BOARD S FINISH: PTD (COLOR TO BE CHOSEN BY OWN WTR-11 MFR: PRODUCT: 6X12 INTERIOR BEAM, CEDAR WITH FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-12 MFR: PRODUCT: 6X12 EXTERIOR-GRADE BEAMS (AM BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN T WTR-13 MFR: PRODUCT: 2X2 EXTERIOR-GRADE COLUMN, CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE" WTR-14 MFR: PRODUCT: 1X6 EXTERIOR-GRADE CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "TAUPE"

<u>GYPSUM WALL BOARD PANELS (CONT)</u>

MFR: USG (OR APPROVED EQUIVALENT)

GYP-3

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	APPLI	ANCE AND ACCESSOR	IES SPECI	FICATIONS LEGEND
BOARD PANELS (CONT)	<u>CASEWORK H</u>	ARDWARE	SINK HARDWA	<u>ARE</u>
MFR: USG (OR APPROVED EQUIVALENT) PRODUCT: 1/2" DUROCK BRAND CEMENT TILE BACKERBOARD PANELS (MOLD AND MILDEW RESISTANT) FINISH: REFER TO FINISH SCHEDULE / INTERIOR ELEVATIONS	CWHW-1	MFR: LEW'S HARDWARE PRODUCT: BLACK STAINLESS STEEL ROUND BAR FINISH: BLACK STAINLESS STEEL (SIZE VARIES BASED ON CABINET SIZE)	SKHW-1	MFR: DELTA COLLECTION: TRINSIC PRODUCT: SINGLE HANDLE PULL-DOWN KITCHEN FAUCET (MODEL #: 9159DST) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE
MFR: USG (OR APPROVED EQUIVALENT) PRODUCT: 1/2" FIBERROCK BRAND AR (ABUSE RESISTANT) INTERIOR GYPSUM WALL BOARD PANELS FINISH: REFER TO FINISH SCHEDULE / INTERIOR ELEVATIONS	ADDITIONAL C CWHW-1	DPTION MFR: LEW'S HARDWARE PRODUCT: SOLID BRASS ROUND BAR FINISH: BRASS (SIZE VARIES BASED ON CABINET SIZE)	SKHW-2	MFR: DELTA COLLECTION: TRINSIC PRODUCT: SINGLE HANDLE WALL MOUNT BATHROOM FA (MODEL #: T3559LFWL) FINSH: MATTE BLACK OR CHAMPAGNE BRONZE
	WASHER/DRY	ER	SKHW-3	MFR: DELTA
MFR: RECLA METALS PRODUCT: 1" STANDING SEAM PROFILE PANEL SYSTEM (10" WIDE TYPICAL) W/ CONCEALED FASTENERS FINISH: 24 GA "ANTIQUE SILVER SKIN" NATURAL COLOR	WA/DR-1 (WASHER)	MFR: GE APPLIANCES PRODUCT: 4.8 CU. FT. CAPACITY SMART FRONT LOAD ENERGY WASHER WITH ULTRAFRESH VENT SYSTEM WITH ODORBLOCK AND SANITIZE W/ OXI		Collection: TRINSIC Product: Two Handle Widespread Bathroom Fauc (Model #: 3559Mpu-dst) Finsh: Matte Black or Champagne Bronze
MFR: RECLA METALS PRODUCT: 1" VERTICAL STANDING SEAM PROFILE PANEL SYSTEM (10" WIDE TYPICAL) W/ CONCEALED FASTENERS FINISH: 24 GA "SECOND SKIN" IN THE COLOR MATTE BLACK	WA/DR-1 (DRYER)	(MODEL #: GFW550SSNWW) FINISH: WHITE MFR: GE APPLIANCES PRODUCT: 7.8 CU. FT. CAPACITY SMART	SKHW-4	MFR: DELTA COLLECTION: TRINSIC PRODUCT: SINGLE HANDLE PULL-DOWN BAR / PREP FAUC (MODEL #: 9959DST) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE
RIOR) MFR: TBD FINISH: TO MATCH 'MP-2'		FRONT LOAD ENERGY ELECTRIC DRYER WITH SANITIZE (MODEL #: GFW550SSNWW) FINISH: WHITE	SKHW-5	MFR: DELTA COLLECTION: DELTA PRODUCT: KITCHEN DISPOSAL AND FLANGE STOPPER (MODEL #: 72030)
<u>OR)</u>	REFRIGERATO	R		FINISH: BLACK STAINLESS OR CHAMPAGNE BRONZE
MFR: LP SMARTSIDE PRODUCT: COLORSTRAND DEEP GRAIN COLLECTION FINISH: 1X6, HORIZONTAL, IN THE FINISH "TETON" MFR: LP SMARTSIDE PRODUCT: SMOOTH SIDING	REF-1	MFR: GE APPLIANCES PRODUCT: 21.8 CU. FT. COUNTER-DEPTH FINGERPRINT RESISTANCE SIDE-BY-SIDE REFRIGERATOR (MODEL #:GZS22IYNFS) FINISH: STAINLESS STEEL	SKHW-6	MFR: DELTA Collection: Delta Product: Kitchen Sink Flange and Strainer (Model #: 72010) Finish: Black Stainless or Champagne Bronze
FINISH: 1X6, VERTICAL, IN THE FINISH "GRAY WOLF"	RANGE		TOILET / HARE	WARF
	RNG-1		TI T_1	
MFR: ROCKY MOUNTAIN SNOW GUARDS, INC PRODUCT: S-5! BLIZZARD II FENCE-STYLE GUARD BRACKET AND ALUMINUM TUBING WITH SWAGED END EINISH: POWDER COAT (PAI, 7030 "STEINGRAU")		PRODUCT: 30" SLIDE-IN FRONT CONTROL GAS RANGE (MODEL #: JGSS66SELSS) FINISH: STAINLESS STEEL		COLLECTION: CLEAN COLLECTION PRODUCT: CLEAN HIGH EFFICIENCY ELONGATED 1.28 gp (MODEL #: 2514.101.020) FINISH: WHITE
	RANGE HOOL	2	THW-1	
MFR: TELLURIDE STONE PRODUCT: LIMESTONE	RH-1	MFR: GE APPLIANCES PRODUCT: 30" WALL-MOUNT PYRAMID CHIMNEY HOOD (MODEL #: JVW5301SJSS) FINISH: STAINLESS STEEL		PRODUCT: TANK LEVER (MODEL #: 75960) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE
FINISH: COTTONWOOD			TOILET PAPER	HOLDER
	MICROWAVE	MFR: GE APPLIANCES PRODUCT: GE PROFILE BUILT-IN MICROWAVE /	TP-1	MFR: DELTA COLLECTION: TRINSIC PRODUCT: TISSUE HOLDER (MODEL #: 75950) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE
FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)		(MODEL #: PWB7030SLSS)	TUDE	
		THUSH. STAINLESS STELL	<u>1005</u>	
ING MFR: KAHRS PRODUCT: MULTI LAYER WOOD FLOORING FINISH: OAK OLAF	<u>DISHWASHER</u> DSW-1	MFR: GE APPLIANCES PRODUCT: FINGERPRINT RESISTANT TOP CONTROL WITH STAINLESS STEEL INTERIOR	IB-1	MFR: DELTA COLLECTION: SYNERGY PRODUCT: 60" x 32" FREESTANDING TUB WITH INTEGRATED OVERFLOW (MODEL #: B14416-6032-WH) FINISH: HIGH GLOSS WHITE
TIMBER ACCENTS (EXTERIOR) MFR: LP SMARTSIDE		DISHWASHER WITH SANITIZE CYCLE & DRY BOOST WITH FAN ASSIST (MODEL #: GDT645SYNFS) FINISH: STAINLESS STEEL	TB-2	MFR: DELTA COLLECTION: HYCROFT PRODUCT: 60" x 30" RIGHT HAND TUB (MODEL #: B10513-6 FINISH: WHITE
PRODUCT: 2X6 CORNER TRIM FINISH: TEXTURED IN THE FINISH "CAVERN STEEL" MFR: LP SMARTSIDE PRODUCT: 1X4 EXTERIOR-GRADE WINDOW & DOOR TRIM (SIDES / SILL) WITH	WINE FRIDGE	MFR: GE APPLIANCES	TB-3	MFR: DELTA COLLECTION: HYCROFT PRODUCT: 60" x 30" LEFT HAND TUB (MODEL #: B10513-603 FINISH: WHITE
2X4 HEADER TRIM FINISH: TEXTURED IN THE FINISH "CAVERN STEEL" MFR:		PRODUCT: GE PROFILE SERIES WINE CENTER (MODEL #: PWS06DSPSS) FINISH: STAINLESS STEEL	<u>SHOWERS</u>	
PRODUCT: BUILT-UP FASCIA WITH EXTERIOR-GRADE 2X10 OVER 2X12 WRAPPED WITH METAL FINISH: MATCH WINDOW SASH COLOR (BLACK) MFR:	<u>sink disposa</u> skd-1	L MFR: GE APPLIANCES PRODUCT: 3/4 HP CONTINUOUS FEED GARBAGE	SHW-1	MFR: TILE REDI COLLECTION: REDI TRENCH SHOWER PANS & BASES PRODUCT: CUSTOM DIMENSION (72" x 87"), FULLY INTEGR SHOWER PAN WITH BACK PVC DRAIN, BACK TI TILEABLE GRATE
PRODUCT: 6X8 EXTERIOR-GRADE ANGLE BRACES, CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE" MFR:		DISPOSER - NON-CORDED (MODEL #: GFC720N) FINISH: BLACK	SHW-2	MFR: DELTA COLLECTION: DELTA PRODUCT: PROCRYLIC 34" x 48" SHOWER BASE (MODEL # FINISH: WHITE
PRODUCT: 6X16 EXTERIOR-GRADE BEAMS, CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE" MFR:	<u>SINKS</u> SNK-1	MFR: AMERICAN STANDARD COLLECTION: PEKOE COLLECTION PRODUCT: PEKOE 35" x 18" STAINLESS STEEL KITCHEN	SHW-3	MFR: DELTA COLLECTION: DELTA PRODUCT: CLASSIC 400 60" x 32" SHOWER BASE CENTER D (MODEL #: 40094C)
PRODUCT: 1X6 EXTERIOR-GRADE TONGUE AND GROOVE CEDAR SOFFIT FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "TAUPE" MFR:	SNK-2	SINK (MODEL #: 18SB.10351800.075) FINISH: STAINLESS STEEL MFR: AMERICAN STANDARD	SHW-4	FINISH: WHITE MFR: AMERICAN STANDARD PRODUCT: MAINSTREAM PEDESTAL SINK
PRODUCT: 6X6 EXTERIOR-GRADE COLUMN, CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE"		COLLECTION: BOULEVARD COLLECTION PRODUCT: BOULEVARD UNDERCOUNTER SINK (MODEL #: 0610.000.020) FINISH: WHITE		(MODEL #: 0467400R.020) FINISH: WHITE
PRODUCT: 4X12 EXTERIOR-GRADE BEAMS, CEDAR WITH WIRE BRUSHED	SNK-3	MFR: AMERICAN STANDARD	SHOWER AND	
TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "TAUPE" MFR: LP SMARTSIDE PRODUCT: 2X6 TRIM		COLLECTION: PEKOE COLLECTION PRODUCT: PEKOE 17" x 17" STAINLESS STEEL KITCHEN SINK (MODEL #: 18SB.8171700.075) FINISH: STAINLESS STEEL	STHW-1	MFR: DELTA COLLECTION: TRINSIC PRODUCT: MONITOR 14 SERIES H2OKINETIC SHOWER TRIN (MODEL #: T14259) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE
FINISH: TEXTURED IN THE FINISH "CAVERN STEEL" MFR: PRODUCT: 3/4" BULLNOSE PARTICLE BOARD SHELVING BOARD FINISH: PTD (COLOR TO BE CHOSEN BY OWNER)	SNK-4	MFR: AMERICAN STANDARD PRODUCT: MAINSTREEM PEDESTAL SINK (MODEL #: 0467400R.020) FINISH: WHITE	STHW-2	MFR: DELTA COLLECTION: TRINSIC PRODUCT: MONITOR 14 SERIES H2OKINETIC TUB & SHOWE (MODEL #: T14459)
MFR: PRODUCT: 6X12 INTERIOR BEAM, CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE"			STHW-3	FINISH: MATTE BLACK OR CHÁMPAGNE BRONZE MFR: DELTA COLLECTION: DELTA
MFR: PRODUCT: 6X12 EXTERIOR-GRADE BEAMS (ANGLED), CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE"				PRODUCT: SINGLE HANDLE FLOOR MOUNT TUB FILLER TRI SHOWER (MODEL#: T4759) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE

NOTE: "OR APPROVED EQUAL" APPLIES TO ALL SPEC'D ITEMS

	<u>TOWEL BAR</u>		
FAUCET	TOW-1	MFR: DELATA Collection: Trinsic Product: 12" Towel Bar (Model #: 75912) Finish: Matte Black or Champagne Bronze	
DOM FAUCET TRIM	TOW-2	MFR: DELATA COLLECTION: TRINSIC PRODUCT: 18" TOWEL BAR (MODEL #: 75918) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE	MA
	TOW-3	MFR: DELATA COLLECTION: TRINSIC PRODUCT: 24" TOWEL BAR (MODEL #: 759240) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE	STUDIOS 315 EAST AGATE AVENUE
/ FAUCET	TOW-4	MFR: DELATA COLLECTION: TRINSIC PRODUCT: 30" TOWEL BAR (MODEL #: 75930) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE	GRANBY, CO 80446 970-887-9366 MAARCHITECTURAL.COM
P FAUCET	TOW-5	MFR: DELATA COLLECTION: TRINSIC PRODUCT: ROBE HOOK (MODEL #: 75935) FINISH: MATTE BLACK OR CHAMPAGNE BRONZE	
F	MIR-1	ΜΕΡ΄ ΠΕΙ ΤΔ	
	WIIX-1	PRODUCT: DELTA STANDARD 24" x 36" FRAMELESS MIRROR FINISH: FRAME W/ 1/4" x 1 1/8" WOOD MOULDING, PAINTED BLACK RE: BATHROOM ELEVATIONS FOR FRAMING DETAILS	S
E	MIR-2	MFR: DELTA PRODUCT: DELTA STANDARD 27" x 41" FRAMELESS MIRROR FINISH: FRAME W/ 1" x 2" PRIMED MDF BOARD, PAINTED BLACK RE: 1/A3.40	
1.28 gpf TOILET	MIR-3	MFR: DELTA PRODUCT: DELTA STANDARD 19" x 28" FRAMELESS MIRROR FINISH: FRAME W/ 1" x 2" PRIMED MDF BOARD, PAINTED BLACK RE: 1/A3.40	
	<u>fireplace</u> fir-1	MFR: HEATILATOR SERIES: CRAVE SERIES GAS FIREPLACE SIZE: CRAVE6048-C (48")	A H M.A
		ΔΝΙΤΕΙ	
	MAN-1	MFR:	
		PRODUCT: 4" x 4" CEDAR WITH WIRE BRUSHED TEXTURE FINISH: BEHR'S SEMI-TRANSPARENT STAIN IN THE FINISH "CHOCOLATE"	
GRATED WASTE AND H)			HE 15 RI EC. 33 RAND
10513-6030R-WH)			
0513-6030L-WH)			MINOR SITE PLAN 2024-0227
ES INTEGRATED BARRIER FREE BACK TRENCH WITH			
ODEL #: B78615-4834-WH)			
ENTER DRAIN			
ER IRIM			FTE OF COLOPE
SHOWER TRIM			JAMES SCOTT + JAMES SCOTT MUNN + 402519
ler trim with hand			SED ARCHIT
			SHEET TITLE : FINISH SCHEDULES

SHEET NUMBER : A0.30

LIGHTING SPECIFICATIONS LEGEND

<u>PENDANTS</u>	
PDT-1	MFR: KICHLER COLLECTION: EVERLY COLLECTION PRODUCT: 15.25" 1 LIGHT BELL PENDANT CLEAR GLASS FINISH: BLACK OR NATURAL BRASS
VANITY LIGHTS	
VL-1	MFR: PROGRESS LIGHTING COLLECTION: HANSFORD COLLECTION PRODUCT: THREE-LIGHT BATH & VANITY FINISH: ANTIQUE BRONZE W/ BRASS ACCENTS OR POLISHED NICKEL
VL-2	MFR: PROGRESS LIGHTING COLLECTION: ARCHIVES COLLECTION PRODUCT: TWO-LIGHT BATH & VANITY FINISH: ANTIQUE BRONZE OR ANTIQUE NICKEL
<u>CEILING FAN</u>	
CLF-1	MFR: KICHLER COLLECTION: BOWEN COLLECTION PRODUCT: BOWEN 60" FAN FINISH: MATTE WHITE
Additional o CLF-1	PTION MFR: KICHLER COLLECTION: LUCIAN COLLECTION PRODUCT: LUCIAN LED 3000K 52" FAN FINISH: SATIN BLACK
EXTERIOR WAL	L-MOUNTED LIGHT
EXW-1	MFR: WAC LIGHTING PRODUCT: SODOR OUTDOOR WALL SCONCE 3000K FINISH: BLACK

INTERIOR TRIM SCHEDULE

FLOOR TRANSITION				
INT-1	MFR: SCHLUTER SYSTEMS PRODUCT: SCHIENE FINISH: BRIGH NICKEL ANODIZED ALUMINUM			
WALLS				
INT-2	MFR: SCHLUTER SYSTEMS PRODUCT: FINEC FINISH: TEXTURED COLOR-COATED ALUMINUM IN "DARK ANTHRACITE"			
INT-3	MFR: SCHLUTER SYSTEMS PRODUCT: JOLLY FINISH: COLOR-COATED ALUMINUM IN "BRILLIANT WHITE"			
INT-4	MFR: SCHLUTER SYSTEMS PRODUCT: DILEX-EKE FINISH: "BRIGHT WHITE"			

DOOR AND WINDOW SPECIFICATIONS LEGEND

<u>TYPE "D-1"</u> MFR: JELD-WEN SERIES: IWP WOOD EXTERIOR DOOR MODEL: W15H FINISH: WALNUT CLEAR FINISH

<u>TYPE "D-2"</u>

MFR: JELD-WEN SERIES: STUDIO COLLECTION INTERIOR DOOR MODEL: SL100 FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)

ADDITIONAL OPTION MFR: JELD-WEN SERIES: MOLDED WOOD COMPOSITE INTERIOR DOOR MODEL: BIRKDALE ALL PANEL FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)

<u>TYPE "D-3"</u>

MFR: JELD-WEN SERIES: STUDIO COLLECTION INTERIOR DOOR MODEL: SL100 FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)

ADDITIONAL OPTION MFR: JELD-WEN SERIES: MOLDED WOOD COMPOSITE INTERIOR DOOR MODEL: BIRKDALE ALL PANEL

<u>TYPE "D-4"</u>

MFR: JELD-WEN SERIES: STUDIO COLLECTION INTERIOR DOOR MODEL: SL100 FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)

ADDITIONAL OPTION MFR: JELD-WEN SERIES: MOLDED WOOD COMPOSITE INTERIOR DOOR MODEL: BIRKDALE ALL PANEL FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)

TYPE "D-5"

MFR: JELD-WEN SERIES: IWP WOOD INTERIOR DOOR MODEL: W15H GLASS PANEL FINISH: WALNUT CLEAR FINISH

TYPE "D-6"

MFR: JELD-WEN SERIES: W-5500 CLAD-WOOD PATIO DOOR MODEL: NARROW STILE SLIDING FINISH: BLACK (EXTERIOR), PAINT BLACK (INTERIOR) HANDLE: OLYMPUS WITH "BLACK POWDER COAT FINISH"

<u>TYPE "D-7"</u>

MFR: C.H.I OVERHEAD DOORS SERIES: FULL-VIEW ALUMINUM FINISH: 20 GLASS PANELS, FRAME COLOR IN "BLACK"

<u>TYPE "D-8"</u>

MFR: GLASS WAREHOUSE SERIES: 24" x 78" PIVOT/HINGED FRAMELESS SHOWER DOOR FINISH: MATTE BLACK **OR** SATIN BRASS

<u>TYPE "D-9"</u>

MFR: GLASS WAREHOUSE SERIES: FRAMELESS SLIDING SHOWER DOOR FINISH: MATTE BLACK **OR** SATIN BRASS **REFRENCE DOOR SCHEDULE FOR DOOR SIZE**

DOOR HARDWARE SPECIFICATIONS LEGEND

DRHW-1	MFR: DEFIAN PRODUCT: C W DO FINISH: MATT
DRHW-2	MFR: DEFIAN COLLECTION PRODUCT: KE
	FINISH: MATT
DRHW-3	MFR: DEFIAN COLLECTION PRODUCT: LO
	FINISH: MATT
DRHW-4	MFR: DEFIAN COLLECTION PRODUCT: BE
	FINISH: MATT
DRHW-5	MFR: DEFIAN COLLECTION PRODUCT: HA
	FINISH: MATT
DRHW-6	MFR: DEFIAN COLLECTION PRODUCT: 12 BA

NOTE: "OR APPROVED EQUAL" APPLIES TO ALL SPEC'D ITEMS

FINISH: PAINTED (COLOR TO BE CHOSEN BY OWNER)

MFR: DEFIANT PRODUCT: CASTLE TOUCHPAD CYLINDER DEADBOLT WITH LONGBRIDGE HALL AND CLOSET DOOR LEVEL COMBO PACK FINISH: MATTE BLACK	DRHW-7	MFR: KIMBERLY BAY PRODUCT: 79" x 2.5" METAL BARN DOOR SLIDING HARDWARE KIT FINISH: BLACK
MFR: DEFIANT COLLECTION: HIGHLAND PRODUCT: KEYED ENTRY DOOR LEVER WITH ROUND ROSE FINISH: MATTE BLACK		
MFR: DEFIANT COLLECTION: HIGHLAND PRODUCT: LOW PROFILE DOUBLE CYLINDER DEADBOLT FINISH: MATTE BLACK		
MFR: DEFIANT COLLECTION: HIGHLAND PRODUCT: BED AND BATH DOOR LEVER WITH ROUND ROSE FINISH: MATTE BLACK		
MFR: DEFIANT COLLECTION: HIGHLAND PRODUCT: HALL AND CLOSET DOOR LEVER WITH ROUND ROSE FINISH: MATTE BLACK		
MFR: DEFIANT Collection: Highland Product: 12 in Ladder Pul Land Flush Sliding Barn Door Handle Set Finish: Black		

<u>TYPE "D-10"</u> MFR: JELD-WEN SERIES: SITELINE CLAD-WOOD PATIO DOOR MODEL: 4-PANEL LOW-FRICTION GLIDER FINISH: BLACK HANDLE FINISH: MATTE BLACK

<u>TYPE "W-1"</u> MFR: JELD-WEN SERIES: W-5500 CLAD-WOOD WINDOW MODEL: RECTANGLE FIXED FINISH: BLACK (EXTERIOR), PAINT BLACK (INTERIOR)

<u>TYPE "W-2"</u> MFR: JELD-WEN SERIES: W-5500 CLAD-WOOD WINDOW MODEL: CASEMENT FINISH: BLACK (EXTERIOR), PAINT BLACK (INTERIOR) HANDLE: NESTING WITH "BLACK FINISH"

<u>TYPE "W-3"</u> MFR: JELD-WEN SERIES: W-5500 CLAD-WOOD WINDOW MODEL: AWNING FINISH: BLACK (EXTERIOR), PAINT BLACK (INTERIOR) HANDLE: FOLDING HANDLE WITH "BLACK FINISH"



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SHEET TITLE : FINISH SCHEDULES

SHEET NUMBER

A0.31



 1
 OVERALL BUILDING ELEVATION - BUILDING 'A' NORTHEAST

 A3.02
 SCALE: 1/4" = 1'-0"

 BACK REF: A3.01

* REFERENCE "F" SERIES FOR DOOR & WINDOW SCHEDULES



SCALE: 1/8" = 1'-0"



OVERALL BUILDING ELEVATION - BUILDING 'A' NORTHWEST BACK REF: A3.01

A3.03 SCALE: 1/4" = 1'-0"







T.O. LVL 3 PLATE

T.O. LVL 2 GYPCRETE + T.O. LVL 1 PLATE

OVERALL FLOORPLAN - 'A' 100' - 0"





* REFERENCE "F" SERIES FOR DOOR & WINDOW SCHEDULES





BACK REF: A3.01



- Horizontal bar guard rail W/ 2x2 Posts, 42" tall min

- Wall-Mounted Gooseneck Exterior light, "Dark Sky" compliant

OVERALL FLOORPLAN - 'B' 102' - 3" _____













OVERALL BUILDING ELEVATION - BUILDING 'B' ROOFTOP DECK SLAT

BACK REF:

2 WALL A3.13 SCALE: 1/4" = 1'-0"

 1
 OVERALL BUILDING ELEVATION - BUILDING 'B' SOUTH

 A3.13
 SCALE: 1/4" = 1'-0"

 BACK REF: A3.01



T.O. LVL 04 PLATE

ROOF MIDPOINT

- T.O. LVL 03 PLATE WTR-3 SDG-1

T.O. LVL 04 GYPCRETE

- WTR-1

T.O. LVL 03 GYPCRETE T.O. LVL 02 PLATE

WTR-2

T.O. LVL 02 GYPCRETE

T.O. LVL 01 PLATE

STN-1 WTR-7

STN-1

OV<u>ERALL FLOO</u>R<u>PLAN - 'B'</u> 102' - 3"



 1
 OVERALL BUILDING ELEVATION - BUILDING 'B' WEST

 A3.14
 SCALE: 1/4" = 1'-0"

 BACK REF: A3.01



- WALL-MOUNTED GOOSENECK EXTERIOR LIGHT, "DARK SKY" COMPLIANT

EXISTING GRADE, DASHED





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* REFERENCE "U" SERIES FOR DIMENSIONS, ETC.

OVERALL FLOOR PLAN - BUILDING 'B' - ROOF A3.10 SCALE: 1/4" = 1'-0" BACK REF:



0'	4'	8'	16'	1	32'
	SCALE	: 1/8" = 1'-0"			







CH 3 DEVELOPMENT STANDARDS: TABLE 3-H-3-1:

MULTIFAMILY - MULTIPLEX:

BUILDING A:

BUILDING B:

REQUIRED OFF-STREET PARKING SPACES: BUILDING A: BUILDING B:

PROVIDED OFF-STREET PARKING SPACES: BUILDING A: BUILDING B:

SNOW STORAGE

REQUIRED SNOW STORAGE: (25%) OF TOTAL PAVED AREA

PROPOSED ROCK **RETAINING WALL** CONSTRUCTION WORKER PARKING

04 SF (0.046 ACRE)
43 SF (0.047 ACRE)
10 SF (0.448 ACRE)
99 SF (0.376 ACRE)
55 SF (0.293 ACRE)
40 SF (1.225 ACRE)
6 SF (2.135 ACRES)

25.01%



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DATE :

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(6) PARKING SPACES (6) PARKING SPACES



(16,399 SF) x 25% = 4,099.75%

PROVIDED SNOW STORAGE: 5,509 SF (33.59%)

PROTECTION NOTES

1.) NO DISTURBANCE, GRADING, OR REMOVAL OF SIGNIFICANT NATURAL FEATURES AND VEGETATION WILL OCCUR BEYOND THE "LIMIT OF DISTURBANCE" LINE, AS SHOWN ON THIS PLAN.

2.) THE "LIMIT OF DISTURBANCE" LINE SHALL BE DELINEATED PRIOR TO CONSTRUCTION WITH FLAGES, ROPING, FOUR FOOT (4') TALL ORANGE CONSTRUCTION FENCING, OR OTHER ACCEPTABLE MEANS.

ON-SITE STORAGE

STORAGE OF SOIL, CONSTRUCTION EQUIPMENT, AND OTHER MATERIALS TO BE ON-SITE IN AREAS DEEMED APPROPRIATE AND OUT-OF-THE-WAY BY THE GENERAL CONTRACTOR.

UTILITIES

RE: CIVIL DRAWINGS FOR UTILITIES.

1 PROJECT SITE PLAN A1.00 SCALE: 1" = 20'-0"

BACK REF:

TRUE

NORTH





SHEET TITLE : SITE PLAN

SHEET N	JMBER :
A1	.00



8. DRY UTILITIES SHOWN HAVE NOT BEEN INSTALLED. CONTRACTOR SHALL VERIFY ANY DRY UTILITY CONFLICTS WITH THIS SITE PLAN PRIOR TO ANY EXCAVATION. 9. FOR QUESTIONS REGARDING THE FND DURING EXCAVATION, FORM SETTING, AND HOUSE CONSTRUCTION REFER TO THE ENGINEERED FOUNDATION PLANS.

N1 U

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT HE AND HIS ASSOCIATES ARE WORKING FROM THE MOST CURRENT PLAN SET AT ONSET OF CONSTRUCTION. DO NOT CONSTRUCT ANY PORTION OF THE LANDSCAPE AND IRRIGATION SCOPE FROM PLANS STATING NOT FOR CONSTRUCTION. FAILURE TO ENSURE PLANS ARE CURRENT MAY RESULT IN RECONSTRUCTION MEASURES AT THE CONTRACTOR'S OWN EXPENSE.
- 2. ALL LANDSCAPE DESIGN IS BASED ON BASE FILES PROVIDED TO TERRACINA DESIGN BY MUNN ARCHITECTURE AND CORE CONSULTANTS, INC.
- THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO PRIOR TO DIGGING, INCLUDING BUT NOT LIMITED TO, TRENCHING AND SHRUB AND TREE PLANTING PITS. IF UTILITIES OCCUR AT LOCATIONS OF PROPOSED SHRUBS OR TREES, THE CONTRACTOR SHALL REPORT SUCH CONDITIONS TO THE OWNER'S REPRESENTATIVE. DAMAGE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE REPAIRED BY THE CONTRACTOR AS HIS OWN EXPENSE.
- A. PROPOSED TREE LOCATIONS SHALL BE FIELD VERIFIED TO ACCOMMODATE THE FOLLOWING:
- SHADE TREES SHALL BE LOCATED 40 FEET CLEAR OF STREET LIGHTS.
- ALL TREES SHALL BE LOCATED A MINIMUM OF 10 FEET CLEAR OF WATER AND SEWER MAIN LINES.
- ALL TREES SHALL BE LOCATED A MINIMUM OF SIX (6) FEET CLEAR OF WATER AND SEWER SERVICE LINES. IV.
- ALL TREES SHALL BE LOCATED A MINIMUM OF FOUR (4) FEET CLEAR OF ALL GAS LINES. V.
- ALL TREES SHALL BE LOCATED A MINIMUM OF FOUR (4) FEET CLEAR OF ALL FIBER OPTIC LINES. VI.
- 3. ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR MAINTENANCE EQUIPMENT ENTRY.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ANY EXISTING MATERIALS AND/OR CONDITIONS DAMAGED DURING LANDSCAPE CONSTRUCTION OPERATIONS. EXISTING CONDITIONS INCLUDE BUT ARE NOT LIMITED TO UTILITIES, DRAINAGE FACILITIES, CURB AND GUTTER, WALLS, WALKWAYS, EXISTING LANDSCAPE AND IRRIGATION AND OTHER SUCH EXISTING STRUCTURES, THE REPAIR OF SUCH DAMAGE WILL BE AT NO ADDITIONAL COST TO THE OWNER BUT SHALL BE AT THE CONTRACTOR'S OWN EXPENSE.
- A MINIMUM OF THREE-FOOT SIX-INCH CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF ALL FIRE HYDRANTS.
- PRIOR TO COMMENCING WORK, THE LANDSCAPE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND NOTIFY THE GENERAL CONTRACTOR IN WRITING OF UNSATISFACTORY CONDITIONS. THE LANDSCAPE CONTRACTOR SHALL NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL CONSTRUCTION BARRICADES, SIGNS AND WARNING DEVICES NECESSARY FOR LANDSCAPE CONSTRUCTION OPERATIONS.
- THE LANDSCAPE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE AND SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE **BEGINNING ANY CONSTRUCTION OPERATIONS.**
- 9. THE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON SITE AT ALL TIMES DURING CONSTRUCTION.
- 10. THE LANDSCAPE CONTRACTOR SHALL HAVE ONE (1) APPROVED COPY OF PLANS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
- 11. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES AND SPECIFICATIONS
- 12. ALL LANDSCAPE CONSTRUCTION PRACTICES, WORKMANSHIP, AND ETHICS SHALL BE IN ACCORDANCE WITH INDUSTRY STANDARDS SET FORTH IN THE CONSTRUCTION HANDBOOK PUBLISHED BY THE COLORADO LANDSCAPE CONTRACTORS ASSOCIATION.
- 13. ROUGH GRADE TO TWO TENTHS (0.2) OF ONE FOOT SHALL BE CONDUCTED BY OTHERS. THE LANDSCAPE CONTRACTOR SHALL PROVIDE FINISH GRADES WHILE MAINTAINING POSITIVE DRAINAGE. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY POORLY DRAINED OR ERODED AREAS PRIOR TO COMMENCING WORK.
- 14. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AND WALKWAYS. HAVE ALL FINE GRADING APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO LANDSCAPE INSTALLATION OPERATIONS.
- 15. THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL LANDSCAPE AREAS. THESE AREAS MAY REQUIRE THE CONTRACTOR TO REMOVE SOIL IN ORDER TO ALLOW FOR APPROPRIATE CLEARANCES FOR SODDING. SEEDING AND MULCH INSTALLATION. THE REMOVED SOIL SHALL NOT REMAIN ON SITE BUT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSAL SHALL BE HIS RESPONSIBILITY AND SHALL NOT BE AN ADDITIONAL COST TO THE OWNER BUT SHALL BE INCLUDED WITHIN THE WORK.

LANDSCAPE NOTES

- 2. ALL LANDSCAPE CONSTRUCTION OPERATIONS SHALL BE IN COMPLIANCE WITH THE CITY OF COMMERCE RULES AND REGULATIONS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO COMPLETE THE WORK.
- 4. THE CONTRACTOR SHALL ACQUIRE A SOILS ANALYSIS FOR THE SITE AFTER COMPLETION OF ROUGH GRADING AND PRIOR TO BEGINNING SOIL PREPARATION WORK. THE SOILS TEST SHALL DETERMINE THE NECESSARY AMENDMENTS AND METHODS OF APPLICATION REQUIRED TO SUPPORT TREES, SHRUBS, GROUNDCOVERS, SEED AND SOD INSTALLATION. THESE AMENDMENTS SHALL BE IN ADDITION TO THE REQUIRED ORGANIC AMENDMENTS.
- 5. THE CONTRACTOR SHALL SUBMIT THE RESULTS OF THE SOILS ANALYSIS TO THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE FOR REVIEW AND CONCURRENCE OF REQUIRED AMENDMENTS.
- 6. ORGANIC AMENDMENTS SHALL CONSIST OF CLASS 1. PLANT BASED, COMPOST: AND AT RATES PER THE SPECIFICATIONS.
- A. PLANT PIT BACK FILL SHALL CONSIST OF ONE (1) PART ORGANIC AMENDMENT AND TWO (2) PARTS NATIVE SOIL. 7. ALL SHRUB BEDS SHALL BE CONTAINED WITH BLACK 6" DEPTH, 14 GA, ROLLED TOP STEEL EDGING.
- EDGING IS NOT REQUIRED WHERE LANDSCAPE BEDS ARE ADJACENT TO CURBS, WALKS OR WALLS.
- THE CONTRACTOR SHALL SUBMIT SAMPLES OF EDGING AND STAKES TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OR INSTALLATION. 8. ALL SHRUB BEDS SHALL CONTAIN WEED BARRIER FABRIC. WEED BARRIER FABRIC SHALL BE TYPAR 3401 4 OUNCE/SQ. YARD GEO-TEXTILE POLYPROPYLENE FABRIC OR APPROVED EQUAL. UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- 9. ALL SHRUB BEDS SHALL BE MULCHED AS SHOWN ON THE PLANS, AT A MAXIMUM DEPTH OF FOUR (4) INCHES AND A MINIMUM DEPTH OF THREE (3) INCHES.
- 10. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER INSTALLATION OF WEED BARRIER FABRIC, MULCH, SOD, AND SEED IS COMPLETE.
- 11. CONTRACTOR SHALL SUBMIT A CUT SHEET FOR WEED BARRIER FABRIC AND A ONE (1) QUART CONTAINER OF EACH MULCH SPECIFIED TO THE OWNER FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION.
- 12. ABSOLUTELY NO EXPOSED WEED BARRIER FABRIC SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER INSTALLATION OF ROCK MULCH IS COMPLETE.
- 13. ALL TREES IN SOD AND SEED AREAS SHALL HAVE A FOUR (4) FOOT DIAMETER, THREE (3) INCH DEPTH MINIMUM, SHREDDED WESTERN CEDAR (I.E. GORILLA HAIR) MULCH RING.
- 14. ALL SEEDED SLOPES 4:1 OR GREATER SHALL BE PROTECTED WITH EROSION CONTROL BLANKET. SEE MILE HIGH FLOOD DISTRICT DETAIL AND SPECIFICATION: EC-6.
- 15. PLANT QUANTITIES ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL FINAL PLANT QUANTITIES.
- 16. ALL PLANT MATERIALS SHALL MEET OR EXCEED CURRENT AMERICAN STANDARDS FOR NURSERY STOCK ANSI Z60.1 AND THE COLORADO NURSERY ACT AND ACCOMPANYING RULES AND REGULATIONS.
- 17. ALL TREES OF THE SAME SPECIES AND SIZE SHALL HAVE MATCHING HEIGHT AND FORM UNLESS OTHERWISE NOTED ON THE PLANS OR TAGGED BY THE OWNER'S REPRESENTATIVE AT THE NURSERY.
- 18. ALL PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 19. THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY AND ALL PLANT MATERIAL BEFORE OR POST PLANTING INSTALLATION. 20. PRIOR TO SODDING, SEEDING OR OTHER PLANTING OPERATIONS; THE CONTRACTOR SHALL APPLY HERBICIDE TO ELIMINATE ALL WEED GROWTH WITHIN THE LANDSCAPE AREAS.
- HERBICIDE SHALL BE ACCEPTABLE UNDER THE TOWN OF WINTER PARK ENVIRONMENTAL RULES AND REGULATIONS.
- 21. ALL INSPECTIONS OF LANDSCAPE MATERIALS, HARDSCAPE AND AMENITIES ARE THE RESPONSIBILITY OF THE LANDSCAPE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE.
- 22. ALL ORNAMENTAL TREES AND SHRUBS SHALL BE WATERED BY AN AUTOMATED IRRIGATION SYSTEM.
- 23. IRRIGATION SYSTEM SHALL BE DESIGN BUILD BY THE CONTRACTOR.

KEY	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	WATER U
DECIDUC					
PAC	POPULUS ANGUSTIFOLIA	COTTONWOOD, NARROW LEAF	2" CAL	B&B	
ORNAMI	ENTAL SHADE TREES		I	•	
AAS	AMELANCHIER ANIFOLIA	SASKATOON SERVICEBERRY	8-10' MULTI-STEM	B&B	
AGR	ACER GLABRUM	ROCKY MOUNTAIN MAPLE	8-10' MULTI-STEM	B&B	
AGF	ACER GINNALA 'FLAME'	MAPLE, FLAME GINNALA	8-10' MULTI-STEM	B&B	
ATH	ACER TARTICUM 'HOT WINGS'	MAPLE, HOT WINGS TATARIAN	8-10' MULTI-STEM	B&B	
СС	CRATAEGUS CRUS-GALLI INERMIS	THORNLESS COCKSPUR HAWTHORN	8-10' MULTI-STEM	B&B	
PTA	POPULUS TREMULOIDES	ASPEN, QUAKING	2" CLUMP	B&B	
PVM	PRUNUS VIRGINIANA MELANOCARPA	CHOKE CHERRY	8-10' MULTI-STEM	B&B	
EVERGRE	EN TREES			_	_
PA	PINUS ARISTATA	PINE, BRISTLECONE	6' HT.	B&B	L
PFP	PINUS FLEXILLIS	PINE, LIMBER	6' HT.	B&B	L
PCL	PINUS CONTORTA LATIFOLIA	PINE, LODGEPOLE	6' HT.	B&B	L
PPG	PICEA PUNGENS	SPRUCE, COLORADO	6' HT.	B&B	L
PES	PICEA ENGELMANNII	SPRUCE, ENGELMANN	6' HT.	B&B	L
EVERGRE	EN SHRUBS				
JSB	JUNIPERUS SABINA 'BROADMOOR'	JUNIPER, BROADMOOR	#5	CONT.	L
		ALDER NATIVE THINLEAF	#5	CONT	
			#5	CONT	
		COTONEASTER, PEKING	#5	CONT.	
SVI	SYRINGA VULGARIS	LILAC, COMMON	#5	CONT.	
	PHYSOCARPUS OPULIFOLIUS NANUS	NINEBARK, DWARF	#5	CONT.	
PFG	POTENTILLA FRUTICOSA 'GOLD STAR'	POTENTILLA, GOLD STAR	#5	CONT.	
RNW	ROSA 'NEARLY WILD'	ROSE, NEARLY WILD SHRUB	#5	CONT.	
505	SYMPHORICARPOS OREOPHILUS	SNOWBERRY, MOUNTAIN	#5	CONT.	
LIT	LONICERA INVOLUCRATA	TWINBERRY	#5	CONT.	
CRAINE	COVERS				
			<i>±</i> 1	CONT	
			<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>		
MKM			# 1 # 1		
			# I # 1		
AMR		KOCKT MOUNTAIN FUSSTIOES	#1	LONI.	L

NATIVE GRASS MIX

% OF MIX	BOTANICAL NAME			
80 %	Festuca arundinacea			
10 %	Bromus ciliatus			
10 %	Bouteloua gracilis			
MONTANE GRASS MIX (20"-24" max Height)				

	200100000
MONTANE GRASS MI	X (20"-24" max Height)
**seeding rate: 2 lbs pe	r 1,000 sq.ft. or 25 lbs per acre

	Evergreen Trees Required	Evergr <mark>ee</mark> n Trees Provided	Deciduous Trees Required	Deciduous Trees Provided	Shrubs Required	Shrubs Provided	Berm Height	Deficiency (if any)
N Boundary Length: <u>293.53</u> linear feet Adjacent properties are zoned: <u>R-1</u> Bufferyard Type: AB C D (circle one)	6	6	6	6	N/A	N/A	N/A	N/A
S Boundary Length: <u>139.37</u> linear feet Adjacent properties are zoned: <u>R-2</u> Bufferyard Type: A B C D (circle one)	4	4	4	4	N/A	N/A	N/A	N/A
E Boundary Length: <u>476.06</u> linear feet Adjacent properties are zoned: <u>R-2</u> Bufferyard Type: A B C D (circle one)	10	10	10	10	N/A	N/A	N/A	N/A
W Boundary Length: <u>414.4</u> linear feet Adjacent properties are zoned: <u>R-2</u> Bufferyard Type: A B C D (circle one)	10	10	10	10	N/A	N/A	N/A	N/A

LANDSCAPED AREA	TOTAL AREA (SF)	TREES REQUIRED (1 TREE / 3,000 SF)	TREES PROVIDED	SHRUBS REQUIRED (5 SHRUB / 3,000 SF)	SHRUBS PROVIDED
DEVELOPMENT ACTIVITY NOT					
LOCATED WITHIN 75 FT OF	0	N/A	N/A	N/A	N/A
BUILDINGS/LOTS/ROADS					
LANDSCAPED AREA	TOTAL AREA (SF)	TREES REQUIRED (1 TREE / 1,500 SF)	TREES PROVIDED	SHRUBS REQUIRED (5 SHRUB / 1,500 SF)	SHRUBS PROVIDED
DEVELOPMENT ACTIVITY					
LOCATED WITHIN 75 FT OF	65,371	44	44	218	220
BUILDINGS/LOTS/ROADS					

THE FOLLOWING WATER NEEDS. L=LOW, M=MEDIUM, H=HIGH

COMMON NAME	
(Tall Fescue)	
(Fringed Brome)	
(Blue Grama)	

NOTES:

shall be evergreen.

1. The Bufferyard Tabulation and Landscape Areas are for the entire project site, not just Phase 1. 2. Landscape Area quantities require a minimum of twenty percent (20%) of both the trees and shrubs









SPECIFIED STAKES DRIVEN AT AN ANGLE, FLUSH WITH GRADE

- 4" HEIGHT WATER SAUCER IN

DOUBLE STRAND GALVANIZED EQUALLY SPACED AROUND

PLACE 3/4" DIA. WHITE PVC, 36" LENGTH, ON ALL GUYING 4" DEPTH MULCH RING TYPICAL IN TURF AREAS

SPECIFIED TRUNK ATTACHMENT

WIRE PROVIDE 3 GUY SYSTEMS PLANT TREE W/ TOP OF ROOTBALL

18 MIN 18

2x DIAMETER OF ROOTBALL, MIN.

PRUNE DAMAGED OR DEAD WOOD

DO NOT CUT LEADER

12 GAUGE GALV. WIRE WITH 3/4" DIA. WHITE PVC ON ENTIRE LENGTH OF EACH WIRE

SPECIFIED TREE STRAP SPECIFIED POSTS ALIGN NW/SE, 2 PER TREE SET MIN 18" INTO UNDISTURBED

SUBGRADE

WRAP ENTIRE SURFACE OF TRUNK UP TO SECOND BRANCH WITH SPECIFIED WRAPPING SECURED @ TOP AND BOTTOM & AT TWO FOOT INTERVALS.

PLANT TREE W/ TOP OF ROOTBALL 2"-4" ABOVE FINAL GRADE MULCH RING, MIN. 48" IN DIA., 4" IN DEPTH.

-4" HEIGHT WATER SAUCER IN NON-SOD AREAS

SPECIFIED BACKFILL MIXTURE AS PER SPECIFICATIONS AFTER TREE IS SET IN PLANTING PIT, REMOVE ALL TWINE & WIRE FROM TOP & SIDES OF ROOTBALL PULL BURLAP BACK 1/3 (MIN.)

SUBGRADE-DO NOT OVER-EXCAVATE

DECIDUOUS TREE PLANTING DETAIL





SET ROOTBALL ON UNDISTURBED





SHEET NUMBER :

L3.00

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SITE LIGHTING SUMMARY MIN FC 0.0 MAX FC 3.2 AVERAGE FC 0.13 MAX/MIN FC N/A

1 SITE LIGHTING PHOTOMETRIC PLAN SCALE: 1" = 10'-0"

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All drawings and written documents herein constitute the original intellectual property of the architect and May not be reused, reproduced or disclosed without the expressed written consent of munn architecture, LLC.

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Luminaire Lumens: Front: Low=47.3, Medium=90.2, High=19.6, Very High=0.0 Back: Low=47.7, Medium=97.8, High=26.9, Very High=0.0 Uplight: Low=0.0, High=0.1

BUG Rating : B0-U1-G0

Photometric Toolbox Professional Edition - Copyright 2002-2011 by Lighting Analysts, Inc. Calculations based on published IES Methods and recommendations, values rounded for display purposes. Results derived from content of manufacturers photometric file.

Page 1

Standard	ds:	ETL, cETL,IP65,Dark Sky Friendly
		Wet Location Listed
Construc	ction:	Aluminum hardware with glass di

Sodor

FEATURES

Input:

Dimming:

Rated Life:

CRI:

 5 year warranty SPECIFICATIONS Color Temp:

Outdoor Wall Sconce 3000K

Weather resistant powder coated finishes

Heavy aluminum shade provides great glare cutoff
ACLED driverless technology

3000K

90

120 VAC,50/60Hz

ELV: 100-10%

54000 Hours

Example: WS-W15708-BZ

DarkSky APPROVED BY DarkSky INTERNATIONAL

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To: Planning Commission

From: James Shockey, Community Development Director

Date: March 12, 2024

Re: Consideration to amend UDC Sec. 3-C-3-4, Wetlands (PLN23-075)

Overview:

The Unified Development Code (the "UDC") Sec. 5-C-1 states an amendment to the text of this UDC may be initiated by Town staff, a citizen of the Town, the Planning Commission, or by the Town Council. Town staff is requesting to amend UDC Sec. 3-C-3-4, *Wetlands* to establish a required setback from wetlands, require mitigation for wetland disturbance, and mitigation procedures for developing within or adjacent to wetland areas.

Staff Analysis:

The Planning Commission held two study sessions on this topic in January and provided direction to staff for drafting the regulations. The Town Council held a workshop in February to review the regulations and agreed conceptually with them.

Below is a quick overview of the proposed regulations, the full text can be found in the attached document:

Five-foot absolute setback

The regulations state that a five-foot setback must be maintained and can't be encroached upon. This includes 1) buildings or structures, including but not limited to driplines, bay windows, chimneys, cantilevered construction and decks; or 2) other development or disturbance activities, including but not limited to fences, gazebos, play equipment, lawns, formal landscaped areas, wells, roadways, driveways, utilities, other infrastructure and site development activities, including but not limited to clearing, storage or materials, grading, filling, retaining, etc.

25' wetland setback

The regulations state that a 25' setback must be maintained unless an activity is exempt from the wetland setback regulations or a Wetland Disturbance Plan is approved by the Planning Commission.

Disturbance Plan

The Planning Commission may allow disturbance of wetland areas or the wetland setback if the disturbance activity to the wetland area and the associated setback meet all of the following criteria:

- 1. A wetland or the associated setback cannot have soil disturbance unless there is no practicable alternative to avoiding a wetland or the wetland setback, and such activity is to either:
 - a. Meet a comprehensive plan strategy;
 - b. Meet a policy of this UDC; or



- c. Allow reasonable use of the property, after considering all other practicable alternatives.
- 2. The project will limit the degree of impact on the wetland area and the associated setback to the greatest extent practical using the mitigation procedures outlined in Subsection H.
- 3. The loss of a wetland area will be compensated for by replacing or substituting the wetland area lost in terms of quantity and quality at a 2:1 ratio. The mitigation locations shall be considered in the following priorities, from highest to lowest:
 - a. Onsite
 - b. Within the same minor drainage basin
 - c. Within the Town limits

The mitigation locations were updated after the study session. The Commission expressed concern with allowing mitigation outside of the town limits and therefore it was revised to town limits. The Commission also expressed concern about future maintenance of structures located within five feet of a wetland. Under Section G, *Submittal Requirements for a Wetlands Disturbance Permit*, staff added a requirement to describe how the wetland setback or wetland area will be protected in the future during maintenance to encroachments in the setback/area.

Wetland Definition

The UDC currently defines a wetland as:

Wetland means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Examples of different wetland types include swamps, marshes, bogs, seeps, fens, carrs, sloughs, wet meadows, and similar areas.

Staff is recommending the definition be revised to state:

Wetland means 1) areas including lakes, rivers, streams, intermittent streams, ponds, sloughs areas of seasonal standing water, or 2) those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as such areas are specifically delineated as provided for in the 1987 edition of the Corps of Engineers Wetlands Delineation Manual. Wetlands generally include fens, swamps, marshes, bogs, and similar areas. Manmade lakes or ponds built for the purpose of detaining runoff are not considered wetlands in the context of the UDC. Wetlands do not need to have a connection to waters of the United States, as defined by 33 Code of Federal Regulations (CFR) parts 328 and 329 (as amended) or U.S. Environmental Protection Agency 40 CFR part 230 (as amended) to fall under Town jurisdiction.



§ 5-B-8 Public Notice Requirements: This Text Amendment Application has had proper public notification pursuant to § 5-B-8 of the UDC. A Newspaper Publication (PUB) was published in the Middle Park Times on February 22 providing notification of the hearing and requesting comments.

No comments have been received as of March 7.

Staff Recommendation:

Staff recommends the Planning Commission provide a favorable recommendation to Town Council for approval of the regulations as drafted.



Subsec. 3-C-3-4 Wetlands

- A. **Purpose and Intent.** This Section establishes minimum acceptable standards for wetland development. The wetland regulations set forth in this section are intended to complement, enhance, and operate in conjunction with the Federal Clean Water Act (CWA). The wetland disturbance provisions of this Code apply notwithstanding any Federal jurisdictional determination on waters or wetlands within Winter Park by the U.S. Army Corps of Engineers or U.S. Environmental Protection Agency.
- B. **Applicability.** This Section applies to all areas within the Town containing a wetland, as defined by this UDC.
- C. **Independent Survey Requirements.** In light of the purpose and intent of this section, if there is any evidence that a site subject to disturbance may contain wetlands as such term is defined in Article 7.C of this UDC, the Town may require the developer to obtain and submit a wetlands survey by an independent third-party consultant specializing in wetlands delineations.
- D. Disturbance of Wetlands and Wetland Setback.
 - Soil Disturbance Prohibited. Soil disturbance and wetland fill within wetland areas is prohibited unless such soil disturbance is associated with the exemptions listed in Subsection D(5). Notwithstanding the foregoing, if a Wetland Disturbance Permit is requested, any approval of such permit may require mitigation of wetland fill at a 2:1 ratio.
 - 2. <u>5-foot Absolute Setback to Wetlands.</u> In no event shall soil disturbance, development activity or other formal activities be allowed within five (5) feet of a wetland area, including but not limited to: 1) buildings or structures, including but not limited to driplines, bay windows, chimneys, cantilevered construction and decks; or 2) other development or disturbance activities, including but not limited to fences, gazebos, play equipment, lawns, formal landscaped areas, wells, roadways, driveways, utilities, other infrastructure and site development activities, including but not limited to clearing, storage or materials, grading, filling, retaining, etc. The five (5) foot wetland setback areas shall only be left in, or restored back to, a natural state.
 - 3. **25-foot Wetland Setback.** No soil disturbance, development activity or other formal activities shall occur within twenty-five (25) feet of a wetland area, including but not limited to fences, gazebos, play equipment, wells, roadways, driveways, utilities, other infrastructure and site development activities (including but not limited to clearing, storage or materials, grading, filling, retaining, etc.) unless an activity in the wetland setback is approved by the Planning Commission per the criteria in Subsection F. Unless an activity is exempt from the wetland setback regulations as provided for in this Section, the wetland setback impacts and/or other relevant concerns shall be evaluated concurrently with each type of development review as provided for in this UDC, including but not limited to rezoning, subdivision, site plan, final development plan, or a building permit on property containing a wetland or watercourse.
 - 4. <u>Subsurface Soil Disturbance Prohibited.</u> Subsurface soil disturbance is also prohibited within five (5) feet of a wetland area, including but not limited to soil nailing and other similar building devices.
 - 5. Exemptions to Wetland Setback Regulations.
 - a. *Exemptions:* Work in a wetland setback is exempt from the wetland setback requirement if the proposed activity is to:
 - 1. Revegetate and/or landscape the setback to a natural, weed-free state without extensive grading;
 - 2. The work is water dependent such as docks and piers;
 - 3. The work involves construction of an at-grade, natural surface trail in a buffer under the supervision of the Town;
 - 4. Install or maintain Town-wide water quality protection ponds and drainage features related thereto;
 - 5. U.S. Geological Survey or other governmental water gauges;



- 6. Necessary to achieve either vehicular or utility access to property, and no other access route avoiding the wetland areas or the associated setbacks is technically feasible, provided the impacts of such access shall be mitigated in conformance with the standards contained in Subsection H of this Section, *Mitigation Procedures for Developing Within or Adjacent to Wetlands Areas*;
- 7. The purpose of the work is to restore the wildlife habitat, wetland restoration, implementation of a compensatory wetland mitigation plan approved by the Town and/or U.S. Army Corps of Engineers, or aquatic or stream restoration activities;
- 8. The work is limited to routine maintenance performed on stormwater facilities (e.g. detention ponds; ditches) where wetlands have developed incidentally to the construction of such facility and were not established for the purpose of wetland mitigation.
- b. Written Approval of Exemption and Potential Mitigation. For an activity to qualify as exempt, the Director must issue an exemption letter for such an activity prior to commencement of the same. An applicant for an exempt activity shall be required to submit a narrative explaining the activity, and the Director may require the submission of a site plan showing a wetland delineation, the proposed activities and the proposed disturbance. Even if an activity is determined to be exempt, the Director may require a mitigation plan as provided for in Subsection H and a development improvements agreement and financial guarantee in accordance with Subsection I to ensure that wetlands and the associated wetland setback are not adversely impacted.
- E. **Compliance with Permit Requirements.** Prior to final approval of a subdivision, site plan, building permit or grading permit, the applicant shall submit a plan to meet the standards set forth in Subsections G and H of this Section. If the site contains areas deemed a jurisdictional wetland by the U.S. Army Corps of Engineers, the applicant must present evidence of compliance with Section 404 of the CWA. Areas that contain wetlands that are determined to be nonjurisdictional by the U.S. Army Corps of Engineers or the Environmental Protection Agency per the CWA may still be considered wetlands of the Town. Moreover, if the site contains what are delineated as wetlands under the U.S. Army Corps of Engineers 1987 Wetlands Delineation Manual and 2012 Supplement for Western Mountain and Valleys, attached hereto and incorporated herein as Appendix B, or areas that would meet the definition wetlands per these manuals, then those wetland areas are wetlands of the Town and subject to these regulations. Documentation and compliance with all potential wetlands matters shall remain the sole and ongoing responsibility of the project proponent, and any failure to maintain such compliance may lead to suspension or revocation of any approvals provided under this UDC.
- F. **Criteria for Approval of a Wetland Disturbance Permit.** The Planning Commission may allow disturbance of wetland areas or the wetland setback if the disturbance activity to the wetland area and the associated setback meet all of the following criteria:
 - 1. A wetland or the associated setback cannot have soil disturbance unless there is no practicable alternative to avoiding a wetland or the wetland setback, and such activity is to either:
 - a. Meet a comprehensive plan strategy;
 - b. Meet a policy of this UDC; or
 - c. Allow reasonable use of the property, after considering all other practicable alternatives.
 - 2. The project will limit the degree of impact on the wetland area and the associated setback to the greatest extent practical using the mitigation procedures outlined in Subsection H.
 - 3. The loss of a wetland area will be compensated for by replacing or substituting the wetland area lost in terms of quantity and quality at a 2:1 ratio. The mitigation locations shall be considered in the following priorities, from highest to lowest:



- a. Onsite
- b. Within the same minor drainage basin
- c. Within the Town limits
- 4. The project's discharges will not violate other applicable regulations and laws (e.g., state water quality standards, the Endangered Species Act, the National Environmental Policy Act), or significantly degrade the waters of the United States or any other wetland.
- G. **Submittal Requirements for a Wetlands Disturbance Permit.** Where all or part of a wetland area or the associated setback is proposed to be disturbed or substantially altered by development, an applicant for development review shall submit a wetlands disturbance plan which shows:
 - 1. A site survey performed by a licensed surveyor showing the wetland areas and setback and the amount, location and acreage of wetland fill, removal or other alteration proposed;
 - A proposed wetland mitigation plan designed by a qualified wetland consultant identifying the proposed mitigation improvements, including those wetland areas to be restored or created in accordance with Subsection H;
 - 3. A grading and erosion control plan, including plant material to be used for revegetation and soil stabilization measures; and
 - 4. A narrative explaining how a proposed activity in the wetland setback or a wetland area will meet the criteria contained in Subsection F.
 - 5. A description of how the wetland setback or wetland area will be protected in the future during maintenance to encroachments in the setback/area.
- H. **Mitigation Procedures for Developing Within or Adjacent to Wetlands Areas.** A mitigation plan shall be required for any unavoidable earth disturbing activities within wetland areas or the associated setbacks. Any earth disturbance within any wetland areas or the associated setbacks shall use the following mitigation procedures:
 - 1. Time grading and construction to minimize soil exposure during periods of snowmelt and rainy periods;
 - 2. Retain and protect natural vegetation; strip only the area required for construction in stages;
 - 3. Infiltrate runoff from impervious surfaces by locating infiltration trenches below driplines, walkways, parking areas and driveways;
 - 4. Minimize length and steepness of exposed slopes by designing with the natural topography; prevent erosion on exposed slopes by placing barriers, such as straw bale dikes;
 - 5. Keep runoff velocities low to prevent high erosive powers by using flow barriers (vegetation, rip-rap, etc.);
 - 6. Protect drainage ways and outlets from increased flows by using rip-rap;
 - 7. Trap sediment on-site by using straw bales, filter fences and sand bags;
 - 8. Any disturbed areas must be replanted with native vegetation;
 - 9. Natural hydrologic flows will be maintained through the site;
 - 10. Minimize earth movement by avoiding cut and fill slopes;
 - 11. Foundations shall be stepped down the slope to minimize cut and fill;
 - 12. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety;
 - 13. Appropriate erosion and sedimentation prevention measures must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date;
 - 14. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the activities primary purpose is to impound water;



- 15. Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance; and
- 16. Any other appropriate measure as deemed necessary by the Town Engineer, the Planning Division, the Planning Commission, or the Town Council.
- I. Financial Guarantee. A development improvements agreement and associated financial guarantee to ensure the requirements of this Section are met shall be posted in accordance with Section 4-B-4, *Development Improvements Agreement* or as otherwise provided for in this UDC. Notwithstanding the forgoing, the term of the financial guarantee for the period following installation shall be a minimum of two (2) growing seasons in order to ensure that successful, stable plant establishment is achieved for all wetland plantings.
- J. **Penalties:** Documentation and compliance with the CWA and these UDC standards shall remain the sole and ongoing responsibility of the applicant, and any failure to maintain such compliance may lead to suspension or revocation of any approvals provided under this UDC.


MEMO

то	Planning Commission
FROM	James Shockey, Community Development Director
THROUGH	Keith Riesberg, Town Manager
DATE	March 12, 2024
RE	Annual Update to the Winter Park Three Mile Plan (PLN19-003)

Overview:

A Three Mile Plan is a long-range plan that outlines where municipalities intend to annex property and describes how they will ensure adequate provisions of services within newly annexed territory. In March 2019, the Planning Commission approved a Three Mile Plan that provided clear direction on how the Town will consider potential annexations in the future. It was adopted again in 2020, 2021, and 2022. With recent annexations, including Cooper Creek Village, Rogers Property, and Beaver Village Condominiums, the Plan required an update to reflect the new town boundary.

The Colorado Revised Statues requires municipalities annually adopt a three-mile plan and outlines the requirements for such plan –

C.R.S. 31-12-105(1)(e)(I) -

Except as otherwise provided in this paragraph (e), no annexation may take place that would have the effect of extending a municipal boundary more than three miles in any direction from any point of such municipal boundary in any one year. Within said three-mile area, the contiguity required by section 31-12-104(1)(a) may be achieved by annexing a platted street or alley, a public or private right-of-way, a public or private transportation right-of-way or area, or a lake, reservoir, stream, or other natural or artificial waterway. Prior to completion of any annexation within the three-mile area. the municipality shall have in place a plan for that area that generally describes the proposed location, character, and extent of streets, subways, bridges, waterways, waterfronts, parkways, playgrounds, squares, parks, aviation fields, other public ways, grounds, open spaces, public utilities, and terminals for water, light, sanitation, transportation, and power to be provided by the municipality and the proposed land uses for the area. Such plan shall be updated at least once annually. Such three-mile limit may be exceeded if such limit would have the effect of dividing a parcel of property held in identical ownership if at least fifty percent of the property is within the three-mile limit. In such event, the entire property held in identical ownership may be annexed in any one year without regard to such mileage limitation. Such threemile limit may also be exceeded for the annexation of an enterprise zone."



The Three Mile Plan identifies six parcels within three miles of our municipal boundary eligible for annexation excluding areas within the municipal boundary of Fraser and areas in the National Forest that were not included in the Land Ownership Adjustment Plan created in 1988 (Resolution 257, Series 1988). The areas included within the Plan are generally eligible for annexation under the provisions of the Colorado Revised Statutes. Inclusion in the Plan does not assume properties will be annexed into the Town or guarantee a successful annexation should it be requested by property owners.

Staff Recommendation:

Staff recommends the Planning Commission provide approval of the Three Mile Plan for the Town of Winter Park with adoption of Resolution 1-2024.



Three Mile Area Plan



March 2024

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3 Mile Plan Map	page 6
Parcel Overview Map	page 7
Area Descriptions	page 8

This plan has been completed by the Winter Park Community Development Department

Mapping assistance was provided by Jodi Flory, NWCCOG

Introduction

The Town of Winter Park Three Mile Area Plan provides direction concerning land use issues and infrastructure needs for lands within three miles of the current boundaries of the Town. The plan identifies issues that should be addressed prior to any parcel of land being annexed into the Town of Winter Park but does not propose the annexation of any lands near the Town. Annexation of any land into Winter Park remains an individual landowner decision. Finally, this Plan addresses requirements for 3 Mile Area Plans as outlined in the Colorado Revised Statutes 31-12-105(1)(e), as amended.

The Town of Winter Park needs to ensure that annexation opportunities are evaluated through careful consideration of both the current and future interests and needs of the community. The Winter Park Town Plan has identified a desire to annex lands in an orderly manner that balances both the short and long term fiscal needs of the community. Annexation proposals should also balance business, residential and industrial land uses to the greatest extent possible with parks and open space to help maintain a balanced, healthy community. Successful annexation applications to the Town should focus on how any particular annexation will meet the goals of the Winter Park community as identified in the Town Plan. Annexation is a discretionary act by the Town of Winter Park; the submittal of an annexation petition is no guarantee that the subject property will be annexed into the community.

The Town of Winter Park wishes to continue to work with Grand County as appropriate to ensure that there is a smooth transition of land uses in the Winter Park area. This plan was developed using a visual survey of the area, mapping information from the Community Development Department, public meetings in Winter Park and review by the Winter Park Planning Commission and Town Council.

Methodology

Criteria to be considered when determining which lands near Winter Park might be desirable for annexation include:

- 1. Areas which will broaden the range of housing types and home ownership opportunities in the Town.
- 2. Areas that have enough buildable land so that desired Town land uses can be accommodated.
- *3.* Areas that are, or can easily be, served by utilities with no negative physical or economic impact on the community.
- 4. Areas that help strengthen the economy of Winter Park.
- 5. Areas that promote infill development.
- 6. Areas that share a community of interest with Winter Park.

No land in unincorporated areas is specifically designated for annexation in this plan. The analysis that follows will only identify areas that may be considered desirable for future uses, can be served by current services and facilities, are existing residential subdivisions, are needed to provide open space for the community, or will be logical for the expansion of the Winter Park urban area. Much of the land within 3 miles of the corporate boundaries of the Town are unsuitable for annexation into the community because they are within the municipal boundary of Fraser or are national forests owned by the United States Forest Service.

Statutory Requirement

The Municipal Annexation Act of 1965 as amended requires that each municipality adopt a Three-mile annexation plan prior to any land annexation that describes and evaluates the suitability for annexation of areas within a three-mile radius. Three Mile Plans, once approved, must be either updated or readopted annually. Colorado Revised Statutes 31-12-105(1)(e)(I) requires 3 mile plans to generally describe the proposed location, character, extent of streets, subways, bridges, waterways, waterfronts, parkways, playgrounds, squares, parks, aviation fields, other public ways, grounds, open spaces, public utilities and terminals for water, light, sanitation, transportation and power for any annexation within three miles of the municipality. Some of these items will not be considered or addressed by this Plan because they are not relevant to the Town (i.e. subways and aviation fields). Those relevant items will be discussed within each annexation category.

Study Area

This plan will address lands within a three mile area of the Town of Winter Park excluding areas within the municipal boundary of Fraser, and areas in the National Forest that were not included in the Land Ownership Adjustment Plan (Resolution 257, Series 1988). The location of each of the areas within the Three Mile planning area is identified on the Parcel Overview Map (page 7). The general character of each of these areas is described and classified according to the following categories.

 Description 	 Transportation
■ Land Use	 Utility Provisions
 Community Services 	■ Open Space, Parks & Recreation

The areas included within the Town of Winter Park Three Mile Area Plan are generally eligible for annexation to Winter Park under the provisions of the Colorado Revised Statutes. Inclusion in this plan does not assume properties will be annexed into the Town or guarantee a successful annexation should it be requested by property owners.

Water Availability

Water availability is a concern with any annexation in the Town of Winter Park. The 2006 Town Plan considered the effects development could have on the Fraser River and its tributaries. The Town Plan stated that water available for municipal use should not impact the amount needed to support the Fraser River and as such any additional zoning entitlements should be planned that at full build-out of Winter Park, enough water will be available to keep healthy rivers and creeks in the Upper Fraser Valley. The 2019 Imagine Winter Park Town Plan reinforced this statement with a requirement that the Town maintain healthy stream flows for ecological, recreational, and scenic purposes.

As part of any future annexation consideration, the Town will require water availability studies when determining zoning entitlements for any parcel located outside of the Town's current municipal boundary.





Denver Water West

This property is commonly referred to as the Denver Water Board parcel. It is located directly west of the current Town boundary.



Land Use:

The property is currently zoned Forestry and Open District by Grand County and is located within the Growth Area for the Town of Winter Park as identified in the 2011 Grand County Master Plan. It is bordered to the north by the Town of Fraser, to the south and west by USFS land and to the east by the Town of Winter Park. The 200 acre parcel is currently undeveloped land that was clear-cut in 2008 during the pine beetle epidemic. The Town of Winter Park currently leases the property as open space and has constructed approximately 4 miles of trails that are open to the public.

Transportation:

The property is accessed from Vasquez Road via a two-track logging road to the center of the property. Access via trail is from Kings Crossing Road, Elk Trail, Bear Trail Court, Vasquez Road and trails in the USFS property to the west.

Utility Provisions:

Water and sewer services would need to be extended to the property although they are in close proximity to the property. Electric lines currently run through the property and gas is available in Vasquez Road.

Community Services:

This section lies within the East Grand Fire District and the East Grand School District. Police protection is currently provided by the Grand County Sheriff's Department with mutual aid from the Fraser Winter Park Police Department. Fire protection and the school district boundaries would remain the same in the event of any annexation. Police protection, however, would be provided exclusively by the Fraser Winter Park Police Department upon annexation.

Open Space, Parks & Recreation:

The Town of Winter Park currently leases this property for public recreation. The Town has constructed approximately four miles of trail that leads from the Town to the surrounding USFS land. If the property is annexed into the Town, it is anticipated that a large amount of the property would remain undeveloped as open space for wildlife migration, wetland preservation, USFS buffer and trail corridors.

Water Availability:

This property is not located within the Grand County Water and Sanitation District No. 1 district boundaries. The Town will require the inclusion of the District and additional water acquired for any zoning entitlements.

Annexation Considerations:

If it were to be annexed into the Town, appropriate zoning for this parcel would be Planned Development to allow for a flexible design that could include a mix of residential and open space. With limited access from Vasquez Road, additional access points may need to be obtained from adjacent properties to permit desired densities. The parcel has been identified as a suitable location for a public or private campground to alleviate the camping pressure along Vasquez Road. The property should remain large lot residential and open space with an interconnected public trail system. The Town has expressed interest in obtaining five acres on the southeast corner of the parcel for attainable/workforce housing.

Mountain Parks

This area is commonly referred to as the Mountain Parks Property. It is located south of Vasquez Road and west of the Town boundary.



Land Use:

The property consist of 2.71 acres of forest located adjacent to Vasquez Road. It was purchased in 1984 by Mountain Parks Electric as a possible location for an electric substation but was recently sold in 2023 to a private individual. It is bordered to the north by Vasquez Road, to the south and west by USFS land and to the east by the Town of Winter Park. The parcel is heavily treed with large spruce. The property is currently zoned Forestry and Open District by Grand County and is located within the Growth Area for the Town of Winter Park as identified in the 2011 Grand County Master Plan.

Transportation:

The property is accessed from Vasquez Road.

Utility Provisions:

Water and sewer services would need to be extended to the property although they are in close proximity. Electric lines and gas are available in Vasquez Road.

Community Services:

This section lies within the East Grand Fire District and the East Grand School District. Police protection is currently provided by the Grand County Sheriff's Department with mutual aid from the Fraser Winter Park Police Department. Fire protection and the school district boundaries would remain the same in the event of any annexation. Police protection, however, would be provided exclusively by the Fraser Winter Park Police Department upon any annexation.

Open Space, Parks & Recreation:

If the property is annexed into the Town, it is anticipated that a significant amount of the property would remain undeveloped as open space for wildlife migration, wetland preservation and a USFS buffer.

Water Availability:

This property is located within the Grand County Water and Sanitation District No. 1 district boundaries.

Annexation Considerations:

If it were to be annexed into the Town, appropriate zoning for this parcel would be R1- Low Density Residential to allow for limited residential development and amble open space to provide a buffer between the Town and the USFS property. If more than four dwelling units are proposed on the property a traffic study should be required

Valley Hi

This property is commonly referred to as the Valley Hi parcel. It is located along Main Street near the intersection of Vasquez Road.



Land Use:

The property is currently zoned Tourist District by Grand County and is located within the Growth Area for the Town of Winter Park as identified in the 2011 Grand County Master Plan. It is an enclave within the Town of Winter Park that has been eligible for annexation since 2021. The 0.371 acre parcel is developed with the Valley Hi Motel and Serene Wellness, a retail marijuana business.

Transportation:

The property is accessed from Main Street near the intersection of Vasquez Road.

Utility Provisions:

The property is already served with water, sewer, electric and gas services.

Community Services:

This section lies within the East Grand Fire District and the East Grand School District. Police protection is currently provided by the Grand County Sheriff's Department with mutual aid from the Fraser Winter Park Police Department. Fire protection and the school district boundaries would remain the same in the event of any annexation. Police protection, however, would be provided exclusively by the Fraser Winter Park Police Department upon annexation.

Open Space, Parks & Recreation:

There is no open space associated with this commercial lot.

Water Availability:

This property is located within the Grand County Water and Sanitation District No. 1 district boundaries. Water service is provided to the existing motel and retail shop.

Annexation Considerations:

If it were to be annexed into the Town, appropriate zoning for this parcel would be DC – Destination Center District due to its proximity to the downtown.

Snowshoe Parcel

This property is commonly referred to as the Snowshoe parcel. It is located on Ski Idlewild Road near Confluence Park.



This property is commonly referred to as the Snowshoe parcel. It is located on Ski Idlewild Road near Confluence Park.



Land Use:

The property is currently zoned Forestry and Open District by Grand County and is located within the Growth Area for the Town of Winter Park as identified in the 2011 Grand County Master Plan. It is an enclave within the Town of Winter Park. The 1.13 acre parcel is developed with a single-family home. The parcel sits adjacent to the Fraser River and a significant portion has wetlands associated with the river. A Pre-Annexation Agreement was approved for this property on June 5, 2001 through Resolution 688, Series 2001. The agreement outlines certain rights to the property if ever annexed into the Town of Winter Park. The agreement was recorded in the records of Grand County at Reception No. 2001-008716.

Transportation:

The property is accessed from Ski Idlewild Road via a dirt driveway to the structure.

Utility Provisions:

The single-family structure is currently connected to municipal water. The structure has a septic tank that is located within the vacant public right-of-way adjacent to the property. Electric and gas service is already installed to the property.

Community Services:

This section lies within the East Grand Fire District and the East Grand School District. Police protection is currently provided by the Grand County Sheriff's Department with mutual aid from the Fraser Winter Park Police Department. Fire protection and the school district boundaries would remain the same in the event of any annexation. Police protection, however, would be provided exclusively by the Fraser Winter Park Police Department upon annexation.

Open Space, Parks & Recreation:

The property contains approximately .40 acres of wetlands adjacent to the Fraser River that should remain as open space if the parcel were to develop. The property also affords the opportunity to connect the Fraser River Trail to Confluence Park along the Fraser River.

Water Availability:

This property is located within the Grand County Water and Sanitation District No. 1 district boundaries. Water service is already provided to the existing structure.

Annexation Considerations:

If it were to be annexed into the Town, appropriate zoning for this parcel would be DC – Destination Center District in compliance with Resolution 688, Series 2001. A higher density residential development is appropriate on this parcel given the current residential development pattern in the neighborhood. A trail easement should be acquired during annexation to connect the existing Fraser River Trail to Confluence Park.

US Forest Service

This property is commonly referred to as the US Forest Service LOAP parcel. It is located east of Main Street between Rendezvous at Winter Park and the Lakota Subdivision.



Land Use:

The property is currently zoned Forestry and Open District by Grand County and is located within the Growth Area for the Town of Winter Park as identified in the 2011 Grand County Master Plan. The 400 acre parcel is owned by the United States Forest Service. Approximately 270 acres of the parcel was identified as land that could potentially be disposed of through the Land Ownership Adjustment Plan (February 1988). The additional 160 acres contains slopes over 25% or are considered to have environmentally sensitive areas.

Transportation:

The property is accessed from Corona Pass Road via US Hwy 40 or Forest Service Road 128 from Arrow Trail. Corona Pass Road is a rough dirt road that follows the former railroad grade when trains traveled over Corona Pass and into Winter Park. Forest Road 128 is a good gravel road that is maintained by Denver Water. Neither road is maintained in the winter.

Utility Provisions:

The area is not serviced by utilities. Although a portion of the area is located within the Winter Park Water and Sanitation District, it is unknown if the area could be realistically served.

Community Services:

This section lies within the East Grand Fire District and the East Grand School District. Police protection is currently provided by the Grand County Sheriff's Department with mutual aid from the Fraser Winter Park Police Department. Fire protection and the school district boundaries would remain the same in the event of any annexation. Police protection, however, would be provided exclusively by the Fraser Winter Park Police Department upon annexation.

Open Space, Parks & Recreation:

The entire 400 acres is currently undeveloped forest land that is open to the public. The Land Ownership Adjustment Plan states that future development should encourage the retention and development of attractive and useful open space, as well as encourage the provision of both passive and active recreation areas.

Water Availability:

This property is not located within either water district. The Town will require inclusion into a district and additional water acquired for any zoning entitlements.

Annexation Considerations:

If it were to be annexed into the Town, appropriate zoning for this parcel would be PD- Planned Development to allow for a flexible design that could include a mix of residential and open space. The area south of Corona Pass Road (USFS 149) could support higher density adjacent to Lakota while the area north of the road could be a lower density large lot residential neighborhood. The northern boundary of this parcel is adjacent to Porphyry Park, a 20-acre park that will be publicly owned in the future as Rendezvous and Roam develop. The Park should be expanded to the south into this parcel to create a large municipal park and wildlife corridor. An interconnected public trail system extending from downtown to Lakota should also be incorporated into any development of this parcel.

Denver Water East

This property is commonly referred to as the East Denver Water Board parcel. It is located directly east of the current Town boundary adjacent to Rendezvous at Winter Park.



This property is commonly referred to as the East Denver Water Board parcel. It is located directly east of the current Town boundary adjacent to Rendezvous at Winter Park.



Land Use:

The property is currently zoned Forestry and Open District by Grand County and is located within the Growth Area for the Town of Winter Park as identified in the 2011 Grand County Master Plan. It is nearly surrounded by the Town of Winter Park with exception of the northeast corner which is United States Forest Service land located in the County. The 160 acre parcel is currently undeveloped land that is used by Denver Water to store material associated with their projects in the area. A majority of the site was clear-cut in 2008 during the pine beetle epidemic and has started to regenerate with lodge pole pine. The eastern half of the property contains a spruce forest with grades in excess of 30%. Corona Pass Road and Forest Service Road 128 (FS128) intersect each other in the center of the property.

Transportation:

The property is accessed from Corona Pass Road via US Hwy 40 or Forest Service Road 128 from Arrow Trail. Corona Pass Road is a rough dirt road that follows the former railroad grade when trains traveled over Corona Pass and into Winter Park. Forest Road 128 is a good gravel road that is maintained by Denver Water. Neither road is maintained in the winter.

Utility Provisions:

The area is not serviced by utilities. Although it is adjacent to the Grand County Water and Sanitation District boundary, it is unknown if the property could be realistically served.

Community Services:

This section lies within the East Grand Fire District and the East Grand School District. Police protection is currently provided by the Grand County Sheriff's Department with mutual aid from the Fraser Winter Park Police Department. Fire protection and the school district boundaries would remain the same in the event of any annexation. Police protection, however, would be provided exclusively by the Fraser Winter Park Police Department upon annexation.

Open Space, Parks & Recreation:

The former logging and railroad town of Arrow (or Arrowhead) was located on this property in the southwest corner near the intersection of Corona Pass Road and FS128. Arrow was the first incorporated town in Grand County serving a population of nearly 2,000 people in its heyday. Foundations and other building material can be found on the property although no standing structures exist. If the property is annexed into the Town, it is anticipated that a large amount of the property would remain undeveloped as open space for wildlife migration, wetland preservation and trail corridors. The site where the town of Arrow is located should be preserved for the public as a historical site. A social trail crosses the property from FS128 to the Arrow trail on Rendezvous property. The Town has expressed interest in obtaining a trail easement across this property to formalize the social trail.

Water Availability:

This property is not located within the Grand County Water and Sanitation District No. 1 district boundaries. The Town will require inclusion into the District and additional water acquired for any zoning entitlements.

Annexation Considerations:

If it were to be annexed into the Town, appropriate zoning for this parcel would be Planned Development to allow for a flexible design that could include a mix of residential and open space. The property should be developed in harmony with the surrounding uses on the Rendezvous property and the protection area northeast of the property. A buffer adjacent to the protection area should be provided to retain the natural characteristics of the adjacent area. The original Arrow town site should be protected from development and turned into a public park emphasizing the history of the former railroad town. A public trail system connecting to the Rendezvous trail system should be considered for any development of this parcel.

The Path to Safety: How Road Diets Can Save Lives



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PLANNING MAGAZINE

The Path to Safety: How Road Diets Can Save Lives

A comprehensive new study shows that narrowing lanes may curb fatalities, save money, promote walking and biking, and mitigate urban

heat.

INTERSECTIONS (/PLANNING/SECTION/INTERSECTIONS/) TRANSPORTATION



The Path to Safety: How Road Diets Can Save Lives

Narrowing lanes offers opportunities to consider all users by adding bike lanes or other pedestrian-friendly amenities, according to a study from Johns Hopkins Bloomberg School of Public Health. Photo by The Image Party/Shutterstock.com.

Feb. 22, 2024

By JONATHAN DEPAOLIS

Crossing the street to get to Main Elementary School in Rome, Georgia, can be downright dangerous for kids. Brittany Griffin, a former senior planner of the northwest Georgia city and now an impassioned advocate for the community, has been trying for years to implement traffic calming measures or install a pedestrian crossing signal along a four-lane, 100-foot-wide stretch of Georgia State Route 293, just a stone's throw north of the school.

While there is a nearby speed camera that aims to slow drivers, there are no traffic lights or safe sections where students can cross when traffic guards are not on duty. To cross at an intersection with safety measures, they would need to walk about a half-mile west. The roadway has been in place since the 1960s, when urban renewal "ripped apart" the low-income Jewish and Black neighborhoods that make up this section of Rome, Griffin says.

She is fighting for the roadway to be narrowed, the curb to be extended, and the medians to be expanded and planted with trees to provide cover for the kids and other pedestrians.

The issue in Rome, Georgia is a snapshot of a problem vexing communities big and small across America. Increasingly, pedestrians and bicyclists are being killed on roadways. In 2022, more than 7,500 pedestrians were killed by drivers, according to a study from the Governors Highway Safety Association.

New research — <u>A National Investigation on the Impacts of Lane Width on Traffic Safety (https://narrowlanes.americanhealth.jhu.edu/report/JHU-2023-</u> <u>Narrowing-Travel-Lanes-Report.pdf</u>), published by the Johns Hopkins Bloomberg School of Public Health in late 2023 — suggests that the solution may be narrowing road widths, sometimes referred to as a road diet.

While the American Association of State Highway and Transportation Officials (AASHTO) Green Book recommends lane widths between 10 and 12 feet, the study found that traffic lanes that were nine, 10, or 11 feet had a lower accident risk or frequency compared to 12-foot lanes. The study — which analyzed 1,117 streets in seven cities (Dallas, Denver, Miami, New York, Philadelphia, Salt Lake City, and Washington, D.C.) — also found that wider lanes with higher speed limits had significantly more crashes than narrower lanes.

DATA FROM THE STUDY

Pedestrian and bike fatalities are rising, making the need for road changes more critical than ever.

Increase in biking fatalities from 2010 to 2020. Pedestrian deaths in 2020 were the highest in four decades.

4%

1,117

Number of roads reviewed in seven cities factoring 20 geometric and street design variables. **9**ft.

Road width that had significantly fewer crashes at 30-35 mph speed limit than wider lanes.



The width of lanes on the roads most easily narrowed (if the speed limit is 20–25 mph or 30–35 mph).

Source: A National Investigation on the Impacts of Lane Width on Traffic Safety

"Other benefits of lane width reduction are increasing roadway capacity, promoting walkability, and inclusive use of streets by all travel modes," the study authors write. Narrowing lane width also can reduce construction and maintenance costs for urban arterials and collectors, the authors add.

3/6/24, 8:01 AM

The Path to Safety: How Road Diets Can Save Lives

Finally, the report reads, "narrowing lane width would address challenging environmental issues by accommodating more users in less space, using less asphalt pavement, less land consumption and smaller impervious surface areas, and the consequent effects on the occurrence of urban heat islands in cities."

Data shows narrow lanes are safer

Shima Hamidi, PhD, an assistant professor of environmental health and engineering at Johns Hopkins Bloomberg School of Public Health and the director of the <u>Center for Climate-Smart Transportation (https://publichealth.jhu.edu/center-for-climate-smart-transportation)</u> at Johns Hopkins University, served as the study's principal investigator along with planning professor Reid Ewing, PhD, who is the Distinguished Chair for Resilient Places at the University of Utah. Hamidi says the number of fatal pedestrian versus automobile collisions is "shocking."

"If you look at the fatality rate in the U.S. — 11.66 per 100,000 population as compared to 1.3 to 3.2 in European countries, almost 10 times higher — it's just worse for pedestrian and cyclists," says Hamidi. "[The year] 2020 marked the deadliest year for pedestrians in 40 years and is just increasing over time. There was a 40 percent increase just between 2010 to 2018 for pedestrian fatalities."

Hamidi says that streets should prioritize the most vulnerable users. And, if a street is safe for pedestrians and cyclists, she says, "then the street is safe for everyone — including drivers."

Narrower lanes also force drivers to pay more attention — a critical safety factor, says Chris Comeau, FAICP CTP, senior transportation planner at TranspoGroup.

When he was the senior transportation planner in Bellingham, Washington, the city received a federal grant to reduce the number of fatal and serious collisions on Alabama Street, a four-lane, two-and-a-half-mile road that connects several low-income neighborhoods. A road diet was implemented, taking it from four lanes to three, with a bike lane on the western third of the corridor, a center turn lane in the eastern third, and few changes to the middle section, which also carries a high-frequency bus route. The whole corridor also received ADA upgrades, sidewalk improvements, and six pedestrian High Intensity Activated Crosswalk (HAWK) signals at bicycle crossings.

Comeau conducted studies in the years that followed. He found that the number of collisions resulting in injuries was reduced by about 30 percent from before the changes, while travel times increased by just one minute.

WHAT PLANNERS CAN DO

The study provides policy recommendations to reduce lane widths and guidance for how to identify the best candidates for lane width reduction projects.



CONSIDER THE NEEDS OF ALL USERS of the street instead of only speed or traffic efficiency.



START WITH 10-FOOT LANES in slower speed areas; ask engineers to justify the need for wider lane widths.



USE CONTEXT specific to the community and road use to determine the appropriate speed.



CREATE A LANE REPURPOSING PROGRAM to support additional bike lanes and expanded sidewalks.

Source: A National Investigation on the Impacts of Lane Width on Traffic Safety

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The Path to Safety: How Road Diets Can Save Lives

Drew Pearson, AICP, senior planner at Wilson & Company, Inc., Engineers & Architects, is working on a similar project to bolster safety for all users of Southwest Boulevard, a five-lane, one-and-a-half-mile corridor in the heart of downtown Kansas City, Missouri. The project — when fully designed — may involve a lane reduction with pedestrian crossing areas at key locations, parking on both sides of the street, green infrastructure, improved freight loading zones, and consolidated space for a shared-use path.

Pearson's team met with residents and business owners — including during a walking and biking tour of the roadway — to explain the project's importance. "We started to be able to talk through shared visions using the context of this street, which I think is really critical," Pearson says.

A question of 'What do you value?'

While conducting the study, Hamidi and the team of investigators spoke with several departments of transportation and urban planners. A common theme was concern about liability risks if lanes widths were reduced and crashes went up.

"But they also mentioned that, in practice, justifying designing and implementing narrow travel lanes is challenging," Hamidi says. "Now, we have the data, and the data says narrower lanes are safer than wider lanes. So, how about we consider lane width reduction and make streets more livable, multidimensional, and safer for everyone?"

But that disconnect over safety is compounded by another challenge — getting decision makers to place that value above overall traffic efficiency.

Robert McHaney, AICP CTP, chair of the American Planning Association's <u>Transportation Planning Division (https://transportation.planning.org/</u>) and chief of integrated planning at Texas-based The Goodman Corporation, says he advises his clients and policy makers — but does not prescribe answers.

"What do you value in your transportation infrastructure?" McHaney asks. "Is it moving from Point A to Point B really fast and efficiently? Do you value trying to develop a place where people want to walk, be, or hang out? The challenge is there is typically only enough right of way for achieving a few of the goals."

McHaney believes the study's recommendations are important for transportation planners to at least evaluate as the data may help get buy-in from stakeholders to make changes. He also thinks planners play a crucial role in that conversation.

"What does the community want to look like in the next 10 to 15 years?" he asks. "Because transportation can help drive that vision."

Jonathan DePaolis is APA's senior editor.

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WINTER 2024

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entrenched ideas about single-familyonly zoning with data, engagement, equity, and political neutrality.

24 Saying No to NIMBYs: A Planner's Guide to Overcoming Pushback Changes to the status quo often put people on the defensive, but planners can level the playing field and lead productive community conversations around important housing policy shifts.

28 ⁷ Need-to-Know Trends for 2024 The new Trend Report for Planners comes out soon. Here's a sneak peek at some of the signals shaping our world—and the profession.



On the cover: Planner Kellie Brown helped guide Arlington, Virginia's missing middle housing movement. From top: Music's economic development potential; the bespoke office of the future.

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Contributors



Alyssa Schukar Cover, Regaining the Missing Middle Ground, page 20

This Arlington, Virginia-based visual journalist, writer, and educator has met deadlines on helicopters and in blizzards. She particularly loves to document how people form and find community, and while on assignment in Arlington for *Planning*, she enjoyed "getting a sense of how intentional planning can create a path forward for communities to flourish."



Kati Woock Making a Music City (Taylor's Version), page 6

Though she's admittedly not a Swiftie, this Michigan-based writer, editor, and e-bike enthusiast thinks music policy might just be the next big thing in planning. "After a few years' lull thanks to the pandemic, live music is back and better than ever," she says. "It's the ideal moment for cities to harness that excitement."



Adam Lubinsky, PhD, AICP How to Pave the Way for Equitable EV Adoption, page 14

"A gas pump? A vacuum cleaner?" When Adam first began planning for electric vehicle infrastructure in 2011, there were few reference points for EV charging stations—and relatively few EVs. Today, with 1.4 million EV sales expected in 2023, the challenge is determining how and where to place those stations on city streets. Adam is working with New York City and state partners to do just that for NYC.

PLANNING

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FROM THE DESK OF THE SUSTAINABLE COMMUNITIES DIVISION CHAIR APA Divisions Help Planners Lead on Climate

LOBAL CLIMATE CHANGE is not an issue of the future. It's here and now, threatening human well-being and the health of the planet. Planners can help lead the charge in adapting to it and mitigating its impacts.

In late November, a coalition of APA divisions surveyed members to understand how the effects of climate change are altering the demands on planners and their ability to respond. Survey responses will help to guide the development of resources, tools, and programs. Climate is also the focus of this year's Divisions

Council Initiative, as all divisions focus attention on the barriers and pressing issues facing planners.

We can't wait to act. Scientists have noted that hurricanes will become stronger and more intense; an increase in droughts and heat waves is predicted; and wildfire seasons are projected to increase in traditionally rainy regions about 30 percent. NASA recently announced that the summer of 2023 was Earth's hottest summer on record—warmer than any other summer according to NASA data and warmer than the average summer between 1951 and 1980.

"In the coming years, planners must lead as we adapt, shape, and redesign our public realm and built environment to meet the challenges brought on by climate change," says Marcel Acosta, chair of the APA Urban Design and Preservation Division (UDPD) and executive director of the National Capital Planning Commission in Washington, D.C.

With the urgent need to address climate change's catastrophic threats, planners are being called upon to understand climate change issues more thoroughly, as well as to incorporate a range of resources and data to become leaders in their communities.



'With the urgent need to address climate change's catastrophic threats, planners are called upon to understand the issues more thoroughly, as well as to incorporate a range of resources and data to become leaders in their communities.'

> —KARLA A. EBENBACH, AICP, LEED GREEN ASSOCIATE

Divisions leading the way

Divisions already offer APA members an array of technical expertise. The Sustainable Communities Division has completed a variety of climate leadership activities over the past eight years, including major contributions to the development of the 2019 Climate Change Policy Guide and the 2022 PAS Report Planning for Climate Mitigation and Adaptation. Likewise, the Hazard Mitigation and Disaster **Recovery Planning Division** (HMDRPD) contributed to two PAS Reports, including Planning

for Post-Disaster Recovery: Next Generation. The Regional and Intergovernmental Planning Division recently supported a policy handbook called "Regional Water Planning for Climate Resilience."

And in mid-November, the UDPD's Design-Preservation Rapid Assistance Team program dispatched a site team of more than 20 volunteers to North Miami, Florida, to develop a comprehensive toolkit for lowimpact development and climate change resilience. Other divisions also offer a variety of other climate-related training workshops, webinars, techniques, and tools.

"Resilience isn't just a buzzword in planning," says Stacy Wright, AICP, РМА, СFM, chair of the HMDRPD and senior project manager at AtkinsRéalis. "Planners play a critical role in facilitating difficult discussions and gaining consensus in our communities. We must continue championing climate change adaptation and hazard mitigation to leave our communities better than we found them."

Karla A. Ebenbach, AICP, LEED GREEN ASSOCIATE, is chair of the Sustainable Communities Division and chair of the Divisions Council Climate Survey Initiative. She also is the president of Ebenbach Consulting LLC. Hotels, cultural attractions, and retailers got a boost during Taylor Swift's six-day run in Los Angeles. In all, The Eras Tour generated \$320 million for the LA economy. ©JUSTIN L. STEWART/ZUMA PRESS WIRE



WHERE PLANNING AND THE WORLD MEET

Economic Development | Adaptive Reuse | People Behind the Plans | Et cetera

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ECONOMIC DEVELOPMENT

Making a Music City (Taylor's Version)

It takes an intentional approach to create policies that support a healthy music ecosystem. By Kati Woock

T'S UNDENIABLE: the Taylor Swift effect is real.

Host cities on the first leg of Swift's The Eras Tour saw a huge influx of visitors-and cash. Over the course of 53 arena events, over a million "Swifties" spent an average of \$1,327.74 to attend, including tickets, outfits, merchandise, travel, and food and drink. Swift's twonight run in Cincinnati saw hotel occupancy surge to 98 percent, with \$2.6 million brought in from downtown hotel revenue in those two days alone. Los Angeles, which hosted the final six shows of the tour's first leg, saw a total economic impact of \$320 million and 3,300 iobs created.

Swifties also were a boon to public transportation in many cities. The Bay Area Rapid Transit system in the San Francisco Bay Area and the Southeastern Pennsylvania Transportation Authority added late-night services to ensure that concertgoers could get home after the performance. The Los Angeles Metro even created a special trip-planning page for Swift fans, complete with lyrical references.

But none of this is happenstance,

says Shain Shapiro, PhD, author of the recently published book *This Must Be the Place: How Music Can Make Your City Better*.

"How many articles have I read about the Taylor Swift–ification of Nashville, where people completely miss the point that Taylor Swift just didn't come out of thin air? There are decades of work behind her success story," he says.

Nicknamed "Music City," Nashville's music industry has a \$10 billion annual economic impact on the region and more music industry jobs—56,000—than any other U.S. city. Nashville is Swift's adopted hometown, as her family relocated from Pennsylvania when she was a teen to take advantage of the music opportunities there. What makes Nashville—or any other city—a place where music thrives? Shapiro believes the first step is a music policy.

More than noise

The COVID-19 pandemic showed us that music really does matter. That's why he thinks now—as cities compete for remote workers—is the right time for cities to enact music



Economic Development Adaptive Reuse People Behind the Plans Et cetera

policies. Music typically falls into the amorphous category of "culture" when a city touts its quality of life, along with green spaces and nature or a thriving restaurant scene. But "music is one of these things that is never seen as deliberate or intentional in a city."

More often, music is regulated in terms of what it might come into conflict with. In London, where Shapiro is based, there is an "agent of change" principle that puts the burden on the builders of new developments near music venues to mitigate noise issues. A music strategy is "where music shouldn't be as much as where it should be," according to Shapiro.

That's why Shapiro is a proponent of "music policies for music purposes," the idea that music should be governed holistically and for its own sake. In many municipalities, music is governed by environmental health, land use and zoning, a cultural or entertainment district, or even alcohol regulations. But music is more than just a noise complaint or a live band playing at a bar.

Music for music's sake

Just as city planners might map green space, bike lanes, or zoning regulations, they should audit music infrastructure. "Knowing where every studio, rehearsal space, and venue is allows you to understand what LISTEN pODCAST Want to learn more about music policy? Scan the QR code below or go to planning.org/ podcasts for Shain Shapiro's episode of *People Behind the*



Plans.

5 STEPS TO DEVELOPING A MUSIC STRATEGY

A music strategy calls for a comprehensive data gathering exercise that maps and assesses music's role in a community. Here's how to get started:

MAP MUSIC AND WIDER CULTURAL ASSETS. These can be spaces and places, businesses, tourism assets, educational and community assets, or the number of artists.

ENGAGE STAKEHOLDERS AND COMMUNITY MEMBERS. Music means many things to different people and one person's music may be another's noise. Engaging the community through interviews, roundtable discussions, and surveys can help identify gaps.

ASSESS REGULATIONS AND IMPLEMENT REFORMS. The overarching concept of the policy is to better define the role music plays in planning and develop policies that proactively manage how music—in all its forms and functions—interacts with the wider community.

UNDERSTAND THE ECONOMIC IMPACT OF MUSIC. The economics of the music ecosystem are often misunderstood. They include music making and dissemination, events, live music venues, the role of music education, and the impact music has on the nighttime economy.

WRITE MUSIC POLICY FOR MUSIC PURPOSES. Using data (from a music audit) means that music can be built into policy—like zoning or economic development—and decisions can be taken to address inequity through evidence, rather than emotion.

SOURCE: PAS QUICKNOTES, "MUSIC POLICY AND PLANNING," BY SHAIN SHAPIRO.

is missing—or where there might be overcapacity," Shapiro says. That allows for the design of economic development policies that can attract or encourage the expansion of businesses.

"A music policy is really about data and evidence gathering so that music can be incorporated into decisions that are already being made in cities around design, planning, economic development, [and] tourism," says Shapiro, who also wrote *PAS QuickNotes*, "Music Policy and Planning."

Once the data is gathered, the goal of a music policy should be to better define the role that music plays in planning and to develop policies that proactively manage music. Shapiro says planners "need to recognize when music needs to be involved in a pre-application or planning approval process" so that a specialist can be brought in if that's needed. When music is included in a policy from the beginning, it can be considered through evidence, rather than emotion, when there are sticking points.

Music audits or music policies can be written by consulting specialists, or cities can create a local authority responsible for music, such as Nashville's Music, Film, and Entertainment Commission or Texas's firstin-the-nation music office. Or take Huntsville, Alabama, which has a music officer within the department of Planning and Economic Development, working under the heads of economic development and long-range planning. Shapiro calls this "the ideal situation."

Huntsville takes the stage

Roughly equidistant from Nashville and Atlanta, both celebrated music cities, Huntsville commissioned Shapiro's firm to conduct a music audit and write a music strategy, completed in 2019. During months of in-depth research, Shapiro's team conducted roundtables in the community, and their survey garnered responses from over 2,000 residents. The results showed there was enough demand in Huntsville to justify the building of a city-funded \$40 million venue, the Orion Amphitheater. "The idea was to create a place that artists want to play and that audiences want to go," Shapiro says. "I think it's one of the best new venues in America."

In 2022, the city created the Huntsville Music Office, led by a full-time officer. In October 2023, the Huntsville Music Office announced the Music Ambassador Program, a first-of-its-kind program that pays Huntsvillebased musicians to promote Huntsville as a destination when they are on tour outside the city.

No one knows where the next Taylor Swift will hail from, but a growing number of cities prioritizing music could mean it's the start of an age. If a full music audit seems out of reach for your city, Shapiro suggests there are easy first steps planners can take to fill that blank space.

"All planners need to do is recognize that a music ecosystem exists and write that it exists," Shapiro says. "That's the most important thing."

Kati Woock is a freelance editor and writer based in Michigan.



Picklemall opened a facility in Tempe, Arizona (above), in August and plans to open 50 locations within the next two years, including a 14-court Midwest facility in a former Toys R Us store in Vernon Hills, Illinois.

ADAPTIVE REUSE

Shopping Malls Score Big with Pickleball Mania

Pickleball courts fit well in the shells of retail stores—and add a new spin to economic development strategies. By Joseph Tedino

HE NATION'S PICKLEBALL

craze and the closing of big retail stores have combined to breathe new life into hollowed-out shopping malls across the country.

Start-ups like Pickleball America in Stamford, Connecticut, and Dallas-based Picklemall Inc. are racing to take advantage of pickleball mania by reusing mall space to build dozens of indoor courts in the carcasses of retail stores that closed up shop during the COVID-19 pandemic.

Pickleball America has leased 80,000 square feet in a former Saks OFF 5th department store for 27 courts at the Stamford Town Center, while Picklemall built 24 courts in 104,000 square feet of space in a former At Home furniture store at Arizona Mills mall in Tempe, Arizona. The facility opened in August with the first 16 courts.

The Stamford mall was already experimenting with an indoor soccer zone, a comedy club, and ballet school to compensate for the loss of dozens of retailers. Pickleball, a social sport with elements of tennis, badminton, and ping-pong that people can learn in about 30 minutes, fits right in.

"The mall was a much better fit all around, from the central location to the ownership and partnership, and the enthusiasm to bring us in," says Mia Schipani, chief marketing director of
INTER SECTION

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Pickleball America, which also looked at vacant Class A office buildings and strip shopping centers. "They immediately saw the value in what we would bring in terms of foot traffic and the repurposing of the space."

More than

just courts,

the Pickleball America plan

for a mall in

Connecticut,

former Saks

OFF 5th retail

Stamford,

includes a

café and

lounge facilities in a

space.

Dan Stolzenbach, the Stamford mall's general manager, expects the courts will "drive additional traffic to the mall, particularly as players realize they can play almost any time of day and without the interruptions from Mother Nature." The pickleball club will be open from 6 a.m. to 11 p.m. daily and support about 1,000 memberships, according to Schipani.

A novel adaptive reuse

Pickleball participation is soaring. In 2022, 8.9 million people in the U.S. played pickleball at least once—an 86 percent increase from the previous year, according to Sports & Fitness Industry Association.

The growth of pickleball has entrepreneurs scrambling to meet demand for court space—and they are finding it in shuttered stores. A vacant Bed, Bath & Beyond in the Meadows shopping mall outside St. Louis reopened in June as the Paddle Up Pickleball Club, offering nine indoor courts and a concession stand.

Putting a pickleball club inside a closed retail store creates opportunities for mall operators, while also meeting the demand for places to play a paddle sport that offers physical, social, and cognitive benefits. Unobstructed views, 18-foothigh ceilings, and concrete floors make retail stores ideal for pickleball courts. It can cost as little as \$10,000 to set up a court in a small store, says Wes Cosgriff, CEO of Ground Rule, a firm that helps companies find and revamp retail space for sports courts.

In a large department store with dozens of courts, developers may need to add lighting, upgrade HVAC systems, and install locker rooms. They may also need to add sound mitigation solutions.

"Everyone is so passionate about pickleball, but you're



going to be hearing from people who aren't so passionate about it," Cosgriff says. Not everyone loves the sound of paddles constantly hitting the plastic pickleballs.

Planners should confirm that pickleball court operators have studied potential sound problems and that they plan to take steps to limit the noise, such as installing sport-approved 10-foot-high sound-dampening curtains or using quieter Green Zone paddles.

Economic development wins

Involving individuals from the municipality's economic development department is also key, Cosgriff says, because they understand the economic impact that adaptive reuse for an indoor sports facility can have at a mall.

In Stamford, repurposing the retail space with pickleball fits in with the mall's revitalization strategy, which includes adding more sports and entertainment choices, Stolzenbach says.

The lion's share of indoor pickleball growth is in the Northeast and Upper Midwest, where demand for year-round court time is high. But the trend has caught on in the South, too, as extreme heat forces the game indoors.

"It's widespread and it's only increasing," Cosgriff says. "And it's not just retail. We're seeing repurposing in flex space, warehouses, office space, and some industrial space."

Picklemall CEO West Shaw plans to open 50 more locations across the country in the next two years. Schipani told *Planning* magazine her company will focus on other large cities in the Northeast before expanding nationally.

Pickleball is growing "at a pace that cannot be sustained without more facilities coming online," Cosgriff says. "Add to that the number of retail store closures that have been happening and it creates an opportunity and challenge for these malls and landlords and an opportunity for pickleball to fit in."

Joseph Tedino is a Chicago-based writer focusing on sports, wellness, and climate.

PEOPLE BEHIND THE PLANS Comprehensive Plans Can Right Past Wrongs

HEN PEOPLE THINK of city leadership, their first thought is probably of the mayor or city council. But few public officials can influence city policies quite the way planners do.

Taiwo Jaiyeoba is the city manager of Greensboro, North Carolina. Before that, he served as the assistant city manager and director of planning for Charlotte, North Carolina. Both cities' plans were honored with APA's Burnham Award for a Comprehensive Plan: Greensboro's *GSO2040* won in 2022, and the 2023 award went to *Charlotte Future 2040*.

Jaiyeoba says there is more to the comprehensive plan than meets the eye and that it is key to making and managing change.

"A good comprehensive plan has to also be a good equity plan because you cannot divorce a comprehensive plan from a discussion around social justice," he says.

Jaiyeoba sat down with Meghan Stromberg, editor in chief at APA, on the *People Behind the Plans* podcast to talk about his work in Charlotte and Greensboro, where comprehensive plans prioritize livability and housing choices. This interview has been edited for length and clarity, but you can listen to the whole conversation at planning.org/podcast or wherever you get your podcasts.

STROMBERG: How did you become interested in planning?

JAIYEOBA: My dad once said to me, "Planners shape the world by their thinking." He told me that I would be successful at city planning because of the way I was wired: I had a good sense of space and places.

In my very first planning class, the professor quoted Shakespeare: "What is the city but the



HEAR THE FULL STORY Want to learn more about equity in planning and zoning? Scan the QR code below or go to planning.org/ podcasts for Taiwo Jaiyeoba's episode of People . Behind the *Plans*, APA's podcast series about urban designers.



Q&A

people?" When I heard that quote, I thought, if you can influ-

ence decisions people make in urban places, then you're successful. And that's what grabbed my interest in planning.

STROMBERG: You've helped develop a number of cities' comprehensive plans in the course of your career. What are some of your guiding principles?

JAIYEOBA: Comprehensive planning is about addressing inequities through policies—not just coming up with new policies or even building on existing policies that perpetuate inequities.

When I think about comprehensive planning in the past, I think about Harland Bartholomew. I felt that he did more damage to our cities through his plans' development than anyone else because his work and teachings were widely influential, particularly on the use of government to enforce racial segregation in land use. He was responsible for developing more than 500 comprehensive plans in the U.S.

Today's comprehensive plans should be about integrated community engagement, achieving equity, promoting sustainability, and resiliency. Ultimately, a good comprehensive plan is also a good mobility plan, a good sustainability plan, a good housing plan, and an equitable plan.

STROMBERG: How do you define livability, and what does it look like on the ground?

JAIYEOBA: I believe absolutely that livability should be about proximity. I talk more about affordable living than affordable housing because what's the point of having an affordable housing unit that's far from the other basic necessities of life? There are areas in



my city, and in many American cities, where I drive miles and miles to get to where I need to go. Housing is more affordable if you can minimize what you spend on getting there.

One of the big ideas in Greensboro's comprehensive plan that came from the community is becoming a car-optional city. For context, our downtown has about 36 percent of its land use dedicated to public and private parking spaces. Now, we're going through a parking plan to determine how we can convert some of these downtown parking spaces into livable spaces that will bring people closer to work, restaurants, bars, and places where they do life.

Our council also adopted two policy initiatives to modify our land-use zoning to accommodate multiplexes in single-family-zoned areas to encourage more missing middle housing. We are also flexing our ability to allow more accessory dwelling units.

STROMBERG: Why did you want to take on the city manager role, and what do you think planners should know about working with elected officials?

JAIYEOBA: As a city manager I'm able to clearly articulate why land-use planning is critical to sewers, water capacity, sustainability goals, housing efforts, homelessness, policing, even fire service deliveries. Every decision is tied to the smart use of land.

I've realized that planners often don't understand the influence we hold over every single decision that's made. Sometimes the most important issue in a council meeting is one rezoning petition or an area plan. And elected officials are not typically the subject matter experts. They depend on us. It takes a planner to unpack the details. With all due respect to every other profession, it takes a planner to be the best city manager. Planners are leaders. Planners have vision. We see how things connect.

Meghan Stromberg is APA's editor in chief.



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Telling the Origin Stories of the Landmarks We Love

From Fenway Park to the Hollywood Sign, Iconic America explores how placemaking adds lasting meaning and memory to our cities. By Ezra Haber Glenn, AICP

N HIS LANDMARK 1960 book, *The Image of the City*, Kevin Lynch reframed our popular understanding of how people make sense of the urban landscape. Rather than thinking of cities as merely physical places that can be methodically measured and objectively mapped, cities must instead be viewed as mental and cultural artifacts.

To help readers understand this process of "mental mapping," Lynch devised a typology of the basic elements we combine as we construct these internal images of the city, including the simplest building block of placemaking, the landmark. Part location, part physical form or structure, part mythic symbol, the importance of landmarks cannot be overstated. Indeed, the entire field of placemaking has sprung up to help planners shape and convey a sense of place to residents and visitors.

Iconic America: Our Symbols and Stories is a new PBS docuseries for planners, designers, community developers, and other placemakers. Produced by David Rubenstein, it delivers an ongoing exploration of the creation and lasting importance of several classic American landmarks.

The documentaries showcase what these places mean to us, what they look like, or how they came to be. As Rubenstein explains, "I've long been struck by the strength of American symbols while saddened by how little we know about them."

At the top of the batting order, the first episode recounts



Iconic America: Our Symbols and Stories is available via traditional broadcast stations and on pbs.org, as well as several popular streaming services. the history of Boston's iconic Fenway Park. Opened in 1912, the oldest ballpark in America is synonymous with both baseball and Boston. Fenway is literally embedded in the very fabric of the historic city, located in the middle of a dense downtown network of streets and historic buildings—including one preexisting thoroughfare that forced left field to be clipped short. This "clipping" resulted in the famous 37-foot-high left-field wall known as "the Green Monster."

The delightful narrative is a treasure-trove of archival images and found footage, delivering a charming blend of urban and architectural analysis, history, and the requisite touch of Red Sox Nation fan-love.

Yankees fans may want to jump right to episode five, featuring the iconic history of New York's Statue of Liberty. Rubenstein weaves together discussions of immigration with the history of urbanization and industrialization, as well as the growth of commerce, globalization, and ways that landmarks serve to frame public debates as well as mark places.

A fascinating episode on the Hollywood Sign tells the story of this early attempt at placemaking, erected in 1923 as a real estate advertisement. Propped up on a hillside, the Hollywood Sign serves as an enduring example of the power of imagination and history in creating a sense of place.

Ezra Haber Glenn, AICP, is Planning's regular film reviewer. He teaches at MIT's Department of Urban Studies & Planning and writes about cities and film. Follow him at urbanfilm.org.

Planners can seed new areas of EV use by placing chargers in neighborhoods where internal combustion engines dominate. In New York City, some on-street chargers cost \$1.50 less per hour to charge when used overnight and also provide free parking. GABBY JONES/*THE NEW YORK TIMES*



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INFRASTRUCTURE HOW TO PAVE THE WAY FOR **EQUITABLE EV ADOPTION**

Three ways planners can empower 'garage orphans' to go electric with publicly accessible chargers. By Adam Lubinsky, PHD, AICP

ORE THAN ONE-THIRD of U.S. adults are "garage orphans"—renters or homeowners who don't have a place to install a private electric vehicle (EV) charger. And that means they might think twice about buying an electric vehicle, even though EVs are increasingly affordable. Availability of charging infrastructure close to home is a big factor in the decision to buy an EV for many consumers. Residents of older urban and suburban neighborhoods might live in homes without garages, driveways, or parking lots, but still rely on a vehicle for their commute.

Most EV owners do have their own garages, but the 10 percent who do not must find other options to recharge. To improve equitable access to the benefits of electric vehicles, it's important to ensure that these residents have access to the infrastructure that supports EV ownership.

It might be tempting to place limited on-street chargers in areas that already show EV ownership, but planners can seed new areas of EV use by placing chargers in

areas where traditional, or internal combustion engine (ICE), vehicles dominate. To encourage the switch from ICE vehicles to EVs, here are three ways planners can be strategic in charger placement by targeting currently unserved areas.

Eliminate charging deserts

PLANNERS SHOULD first collect census and demographics data to understand how current EV charging infrastructure relates to low-income communities and environmental justice. Studies have shown that Black and Hispanic majority neighborhoods, as well as areas with lots of multifamily housing, have lower access to public and publicly funded chargers. Planners can analyze building typologies within these neighborhoods to understand where residents don't have access to private parking.

Overlaying this data with maps that show EV charging locations, such as the one from the Alternative Fuels Data Center, can help target underserved communities within EV charging deserts, typically defined as areas where the

TOOLS FOR THE TRADE Infrastructure | Tech | Engagement

nearest public charger is more than a 10-minute walk away.

It's not just neighborhood residents who need chargers: commuters and visitors to a neighborhood will also use on-street chargers. Planners can focus on areas with a combination of traits: lack of public transportation, a high rate of incoming and outgoing car commuters, and the presence of large workforces such as hospitals and universities or high-traffic destinations like stadiums, zoos, and parks.

Cities can partner with large institutions and take advantage of the fact that their employees park and could charge at work. Those employers could encourage and potentially incentivize EV use. Ride-share drivers will be hunting for public chargers as well: both Uber and Lyft have committed to be all-electric by 2030.

Consider the potential for 24-hour use of public chargers—by visitors during the day and by residents overnight—and use parking to incentivize EVs over traditional cars and trucks. For example, on-street chargers in New York operated by FLO cost \$2.50 per hour during the day and just \$1 per hour overnight. Besides the cost of charging, parking is free in those spaces.

Place chargers strategically

2 LIKE ANY MUNICIPAL infrastructure project, planning for publicly accessible EV chargers requires a careful review of available data as well as community input. Planners should consider demographics, air pollution concerns, public transit connectivity, parking restrictions, and current EV charging locations and use.

At the curb level, public charger placement should work to reinforce a sense of place, promote accessibility, and support street life, taking into consideration the width of sidewalks, location of curb ramps, and the direction of travel (since most charging ports are on the driver's side). Prioritize EV charging deserts and areas with heightened levels of air pollution where cars are the main option for commuting. Neighborhoods with many garage orphans—especially those adjacent to areas with a high rate of incoming car commuters—are the optimal places for new public chargers.

While on-street parking regulations



Tacoma, Washington's 15 Neighborhood Business Districts have each received one new streetside charger. The chargers are affixed to LED streetlights, freeing up electricity to support the chargers with minimal upgrades.

in residential neighborhoods with a high number of garage orphans typically don't require car owners to move their vehicles frequently (if at all), main streets usually employ time-limited parking. Planners can place new chargers on streets at the border of residential and commercial areas, where parking limits ensure a good charge (at least two hours at a Level 2 charger) but don't allow the EV to be parked so long that they don't see turnover. Cities can then adjust parking regulations to support daytime charging for visitors and overnight charging for residents or incentivize EV ownership by waiving residential parking permit fees for EVs.

Educate the public about the benefits of EV charger access

3 EFFORTS TO PLACE chargers on neighborhood streets might draw pushback from those worried about losing parking spaces for ICE vehicles or disrupting neighborhood character (particularly in historic districts). Planners can share the importance of EV charging access for garage orphans to level the playing field for EV ownership. On-street chargers located near main streets with shopping and dining can also help those local businesses compete with large-format retailers who might have dedicated parking lots and chargers for their customers.

The goal of any public charging infrastructure program should be to replace ICE trips with EV trips. Some critics argue that a focus on switching to EVs encourages driving over cleaner modes like transit or nonmotorized transportation. But many residents live in areas with few commuting options beyond driving, and the transition from internal combustion engine vehicles to EVs will be vital in reducing emissions. In areas with poor transit, providing charging infrastructure is an equity issue and critical to the fight against climate change.

While significant public investments have helped single-family homeowners install electric vehicle chargers, garage orphans are left out in the cold. Our cities could become segregated by EV and ICE usage—with corresponding air pollution disparities—if some areas have little or no access to charging infrastructure. Planners can help drive an equitable and inclusive switch to EVs with thoughtful deployment of public chargers.

Adam Lubinsky, PHD, AICP, is a partner at WXY Studio and an associate professor of professional practice at Columbia University's Graduate School of Architecture, Planning, and Preservation. He is also the chair-elect for APA's Public Schools and Communities Division.



4 AFFORDABLE HOUSING TOOLS FOR EVERY STAKEHOLDER

APA's Technology Division shares sources to help planners make decisions about urban development, land use, and affordable housing. *By Sarah Bassett, Vasudha Gadhiraju, AICP, and Colleen Willger, AICP*

ODAY'S PLANNER IS working amid a housing crisis. Home buying is becoming harder for many, as is renting a place that's affordable (generally defined as costing 30 percent or less of a renter's gross income). Further, the National Equity Atlas found that 81 of the 100 most populous regions declined in affordability between 2013 and 2019. As planners continue to cultivate partnerships with nonprofit organizations, builders, policy makers, community members, and others to help change how we design, build, and deliver better and more equitable housing, we also have new avenues to explore. Technology can be a powerful and positive disruptor, offering planners tools that help us better access, analyze, and visualize demographic and spatial data, community needs, and housing delivery options.

HUD GEOSPATIAL DATA STOREFRONT DATA | VISUALIZER



The U.S. Department of Housing and Urban Development (HUD) curates the Geospatial Data Storefront, a resource for users interested in understanding and using housing and urban development data. A gateway to HUD's authoritative geospatial data reserves, it offers neighborhood-level indices that gauge facets of opportunity, which encompass access to education, employment, and transportation.

The portal includes frequently requested datasets, including locations

of public housing developments, Rental Assistance Demonstration minority concentrations, Community Planning and Development maps, the Tribal Directory Assessment Tool, the Choice Neighborhoods mapping tool, and American Community Survey Comprehensive Housing Affordability Strategy data. For advanced data practitioners and those with GIS skills, there are data dictionaries and code examples illustrating the use of APIs (application programming interfaces) to integrate HUD data into other applications. Nontechnical users can explore an array of web-based GIS applications-each with training materials and documentation-to see HUD's investments within a chosen city, county, metropolitan area, state, or congressional district.

COST: 🔵

CODING SKILLS REQUIRED: • **RESOURCE FORMATS:** Geospatial data sets, mapping tools, APIs

POLICYMAP DATA | VISUALIZER



PolicyMap is a data warehouse and analytics tool with over 50,000 indicators. This versatile tool provides data and information sets, such as median rent, income levels, housing cost burden, and demographics, to address affordable housing challenges and support various stakeholders in the planning process. For policy makers, researchers, and community organizations, PolicyMap aids in identifying areas with pressing affordable housing needs, facilitating targeted interventions, and making informed policy decisions. Developers and investors can use it to gain insights into housing market trends and identify where affordable projects are viable. Local governments can use it to pinpoint neighborhoods requiring intervention and initiatives. PolicyMap supports equity analyses by overlaying housing data with socioeconomic indicators using resources such as the Housing Attainability Index. It also aids in monitoring policy impacts and serves as a valuable resource for research and

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TOOLS FOR THE TRADE Infrastructure | **Tech** | **Engagement**

community engagement in affordable housing planning.

COST: ●

CODING SKILLS REQUIRED: • RESOURCE FORMATS: Geospatial data, informational dashboards

NATIONAL HOUSING PRESERVATION DATABASE

DATA | TOOLKIT



The National Housing Preservation Database (NHPD) is a curated resource jointly created by the Public and Affordable Housing Research Corporation and the National Low Income Housing Coalition, offering a detailed inventory of federally assisted rental housing in the U.S. This database empowers planners, policy makers, and affordable housing advocates, providing them with essential information to identify and protect public and affordable housing within their communities. NHPD aggregates data from HUD and the U.S. Department of Agriculture, such as contract expiration dates, loan maturity dates, recent physical inspection scores, unit counts, ownership details, and subsidy characteristics from 10 federally subsidized programs. Users can download the entire dataset or a filtered subset tailored to specific geographic areas, from cities to states. Additionally, NHPD offers Housing Preservation Toolkits that can be customized for individual communities. Other NHPD resources include local partner databases, reports, advocate guides, and webinars.

COST:

 (registration and Esri licensing may be needed)
 CODING SKILLS REQUIRED:

 RESOURCE FORMATS: Geospatial data, Excel, reports, toolkits

BALANCING ACT ENGAGEMENT | VISUALIZER

You have a housing plant

Public engagement is one of the toughest challenges communities, planners, and public officials face as they work to meet the demand for new housing. With Balancing Act, a simulation-based public engagement tool, residents become catalysts of change, actively participating in the decision-making process to become more informed and empowered stakeholders. This allows a more engaged exploration of strategies and solutions to meet the defined housing targets set by city officials. A defining feature of this tool is its ability to adapt to the unique requirements of a community. A mobilefriendly tool, it also features virtual faceto-face interactions with facilitators and streamlines informed engagement and transformative action in the pursuit of equitable, accessible housing solutions.

COST: • CODING SKILLS REQUIRED: • RESOURCE FORMATS: Simulations, scenarios, visualizations, reports

Sarah Bassett is an APA Technology Division board member, director of urbanism at Peoples Culture, and co-director of the Resilient Visions CoLab at Arizona State University. Vasudha (Vasu) Gadhiraju, AICP, is the director of innovation and technology for Normal, Illinois. Colleen Willger, AICP, is the director of urban strategy in AECOM's Center of Excellence for Urban Analytics. ENGAGEMENT

AN EASY-TO-USE CARD DECK TO SHAKE UP YOUR PRACTICE

Tackle five engagement myths with this set of cards featuring solutions built on successful case studies. *By Kati Woock*



The cards encourage events like this—people gathering to paint a Detroit neighborhood bike lane—and include questions to evaluate community engagement practices.

YTH #1: traditional community engagement is always effective. While working in the Fitzgerald neighborhood of Detroit, planners found that typical community engagement strategies wouldn't cut it. Rather than relying on traditional meetings, the team used creative solutions to meet residents where they were. A bounce house, dance lessons, a pop-up grill with free food, and a bike lane pilot project offered frequent, informal opportunities for residents and planners to connect. They found that ongoing opportunities for residents to engage with practitioners facilitated the trust needed for long-term success.

"If the focus is on the relationship, the project or outcome will come naturally," says Daniel M. Rice, president and CEO of the Ohio and Erie Canalway Coalition and co-executive director of the Ohio Erie Canalway. Rice is one of a diverse working group of repre-

sentatives from planning, architecture, government, higher education, and the nonprofit realm that developed the Transform Your Practice deck, a new tool for planners from Reimagining the Civic Commons, a national initiative that invests in public spaces.

Transform

Your Practice

The deck—available as a free download—is organized into five myths about public engagement, each followed by fresh ideas and space to document outcomes.

In addition to the myth that traditional engagement is guaranteed to work, the resource addresses four other myths: there will be a golden moment of harmony, everyone comes to the process in the same way, the "community" turns up, and getting "input" from residents should be the focus. Each myth is explained and accompanied by a case study that shows the solutions in action. Planners can use the deck to assess current practices, learn new strategies, and more. "[We] seek to acknowledge the challenges of relationship building and encourage practitioners to reevaluate their approach to focus on building trust," Rice says.

Rethinking public engagement

"We knew that community engagement as a practice had become a check-thebox activity and that constituencies and practitioners were frustrated by the process and results," says working group member Paul Bauknight, president and founder of the Center for Transformative Urban Design, owner of the Urban Design Lab, civic scholar-in-residence

at Minneapolis College of Art and Design, and spatial justice

and social equity fellow at GGN Landscape Architects. "We wanted to help those doing the work do it better by developing a simple tool that could be used in the field."

Bauknight stresses that rethinking public engagement is especially important in reaching historically underserved communities who may have a history of struggling "with traditional engagement strategies, many times because of distrust."

Are you only hearing from a few dominant voices or naysayers? Are your meetings held in hard-to-reach places? You might be operating under the myth that the "community" always shows up. This deck gives varied and practical solutions. Use it as you identify supporters and begin working together to create a shared vision—and don't forget to feed them!

Kati Woock is a freelance editor and writer based in Michigan.

REGAINING THE MISSING MIDDLE GROUND

How planners in a Washington, D.C., suburb fought entrenched ideas about housing with engagement, equity, and political neutrality. By PATRICK SISSON Photographs by ALYSSA SCHUKAR

The single-family homes found in neighborhoods like Lyon Park are out of reach for many Arlingtonians, but a recent hard-won fight for zoning reform makes greater housing diversity possible.

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Located inside the Beltway adjacent to the nation's capital,

Arlington County, Virginia, has cultivated a distinct reputation for high densities of federal workers, doctorates, and decorum. The civic success of the region, which was picked in 2018 to be Amazon's second headquarters, owes much to what many in the wealthy suburb call the "Arlington Way" of rational, dispassionate government. One former official joked, due to the laboriousness of the exercise, the county's real slogan should be "Process. It's our most important product."

But that veneer of unity was put to the test during a multiyear debate over upzoning and missing middle housing, specifically allowing multiunit structures like low-rise apartments, duplexes, or triplexes in the vast swaths of the county's residential land zoned only for singlefamily homes. Like many communities in the region and across the country, Arlington has become a victim of its own economic success in terms of housing shortages and affordability: the average home sale price was more than \$800,000 in 2022 and median two-bedroom rent is \$2,600 as of November 2023. That has helped further the divide between renters and homeowners, especially NIMBYs (Not in My Backyard).

The planning commission saw this challenge as more reason to embark on zoning reform, which made key progress in March 2023. After spirited debate continued over multiple meetings with hundreds of speakers—as well as a blitz of yard signs and childish antics during comment sessions—a unanimous decision was reached by the county board in favor of upzoning all singlefamily-zoned areas to allow up to six dwelling units per lot.

The process, which planners researched and refereed, got Arlington to a yes and offers a blueprint for other communities on how to utilize community engagement and self-determination against loud protest and pushback from NIMBYs.

"One of the strategies that was really clear to us from the very beginning was the importance of community," says Kellie Brown, section



supervisor for comprehensive planning in Arlington. "What exactly were the problems we were trying to solve? We really put together a series of research questions that helped us clearly provide an answer."

Wealthy communities like Arlington, filled with single-familyonly zoning, represent a bellwether in the larger national push for upzoning, housing reform, and improved affordability.

While the Obama, Trump, and Biden administrations have spoken of the urgent need for zoning reform, housing costs continue to strain the budgets of many Americans. Planners who today find themselves at the cutting-edge of housing choice and housing





Kellie Brown.

left, and other planners strove

to educate the

community

and current

issues, while avoiding jargon.

Showing real-

life examples, like this infill

development

family houses (below), helped

people visualize

amid single-

options and

challenges.

about the planning context diversity, can't—and shouldn't—become political actors in this fray. But in Arlington, like so many communities, the majority that may favor change often finds itself blocked and delayed by groups operating under the NIMBY banner.

Demographics shape demand

Arlington's seven-person planning department got to work by framing and informing the conversations, communicating the stakes, and educating the community about the history and future of zoning policy in the area.

The hoped-for, recommended change was upzoning all single-family parcels to accommodate up to eight units. The missing middle plan that finally passed in early 2023 was slightly more limited; single-family lots could now accommodate up to six-unit structures, and annual approvals would be limited to just 58 projects per year until 2028. But it's widely seen as a vital first step in additional reform and an inspiration to similar efforts in neighboring parts of Northern Virginia that are dealing with these issues right now.

"This has led to sustained interest in more affordable housing in less-dense parts of Arlington," says Eric Maribojoc, a University of North Carolina at Chapel Hill real estate professor

As planning department research found, redevelopment of existing properties into larger homes is actually making the affordability and inequity crisis worse.



focused on housing affordability. "Making a dent like this in a community like Arlington, going one step at a time, is the right approach."

In the case of Arlington zoning reform, demographics have proven to be instrumental. Beginning in the 1970s, as Washington, D.C., metro stations splayed out from the capital, Arlington began zoning for and building massive, transit-oriented housing developments adjacent to stations along four separate rail lines. The "Arlington Way," in part, refers to aggressive community action of the era that pushed plans for aboveground rail stations underground and shrunk a proposed highway, in effect transforming the county from a struggling inner-ring suburb into today's more dynamic urban fabric.

By the 1990s, apartment dwellers outnumbered those living in single-family homes, and most of the region's developable land had been built out. That has attracted a younger, more diverse community to Arlington that has increasingly been engaged with the direction of local government.

But, with most of the county's land zoned exclusively for single-family housing, apartments and condos aren't coming online fast enough to meet demand.

Arlington planners anticipated these issues for years. Beginning in 2015 with the county's Affordable Housing Master Plan-and continuing through successful efforts to legalize accessory dwelling units (ADUs) and a 2019 equity resolution to examine county policy through an equity lens-it was clear that expanding housing and diversity were key goals that were being left unmet. As Arlova Vonhm, AICP, the county's zoning administrator and zoning division chief, put it in an interview, Arlington was great at attracting high-rises near mass transit but had begun to reach its limit. It was time to figure out what to do with the 79 percent of the county's residential land area where only single-family homes were allowed.

That's where missing middle housing came in. Broadly defined, this type of housing covers an array of mid-rise, often vernacular options, mainly smaller apartment complexes of a few stories. Once a staple of cities and inner-ring suburbs, they met the needs of a variety of household types with varying budgets. In many cases, they've become signature urban housing styles, like Brooklyn brownstones, Chicago greystones, or the dingbat apartments of Los Angeles.

Educate and engage

That was the context behind the planning department's detailed three-phase approach: conduct a missing middle study (which began in 2020), formulate a policy proposal, and refine it via additional community feedback and engagement. For Brown, that meant formulating a broad-based community engagement approach informed by the confines of the pandemic to reach parts of the population that really hadn't been brought into similar discussions in the past.

"Because of the pandemic, we pioneered all kinds of new communication strategies," Brown says. "We were very intentional with all our meetings and aimed to reach the broadest cross-section of the community possible."

This included virtual engagements, Jira boards (a type of shared digital whiteboard), and pop-up events at popular community gatherings. Listening sessions and virtual walking tours helped familiarize community members with the issues at stake and showed off legacy examples of missing middle homes.

It was instrumental to the proposal's package to engage with the renter population. As Brown's colleague Matthew Ladd, AICP, Arlington's principal planner, adds, the goal was to fulfill the board's advisory role, take the community's pulse, and provide the decision makers—the elected officials—with input and information to make sure they understood the proposal.

Part of the challenge was awareness and language: Brown felt it could be hard to set the groundwork to solve the housing shortage without a common set of assumptions, history, and facts, as well as jargon-free ways to discuss the county's housing stock. That's why the most important document the planners produced wasn't the final proposal.

During the first phase of the process, they created a five-part Research Compendium, a detailed, visually focused report tracing the history of the city's zoning and housing rules. Information was made to be very user-friendly, with extensive charts, diagrams, and visuals produced by an outside designer. It made the information accessible so that readers didn't need a degree in planning to understand it.

One key section of the compendium focused on the history of county zoning and, as the researchers and planners noted in the report, the "legacy of exclusion and a lack of housing opportunities for a diverse

SAYING NO TO NIMBYS: A PLANNER'S

How to shut down anti-housing arguments and spark real conv

onfronting and combating NIMBY (Not In My Backyard) sentiment has become a necessary part of a planner's job. Alterations to the status quo inevitably bring pushback—whether it's changes to parking codes, commercial districts, or housing and the structures and rules of local government that planners are bound to follow give local opponents of zoning reform ample airtime and opportunities to plead their case.

Strategic planners can help level the playing field and create true community conversations around important policy shifts—by following these suggestions.

SEEK CLARITY AND FOCUS. Help define the conversation before it begins. The distillation of planning documents down to language devoid of specialist terms and acronyms should be the first part of any public process by planning departments. It's difficult to provide clarity or capture attention with complicated descriptions. The overuse of certain words (such as zoning, multifamily, and density) also may trigger pushback.

But simplicity and clarity are not only about using better word choices but also recognizing the importance of speaking the local language and acknowledging the everyday lived experience, says Taiwo Jaiyeoba, city manager of Greensboro, North Carolina, and former planning director of Charlotte, North Carolina, where he oversaw a successful zoning reform effort. He says that making references to New York City or San Francisco may turn off audiences; they're not those cities and don't want to be. Show citizens their own streets and districts and exactly how they will be affected by any proposed changes.

In Arlington, Virginia, where new regulations allow duplexes and triplexes in formerly single-family-only neighborhoods, planners led a successful zoning reform effort in part by sharing photos from dozens of Arlington neighborhoods with examples of missing middle housing.

Graphics need to show real impacts on neighbors: where will grandparents age in place, kids play, or consumers shop?

GUIDE TO OVERCOMING PUSHBACK

ersations about policy shifts. BY PATRICK SISSON



Engaging with community members on both sides of the issue—and in ways they can relate to—is a crucial part of the strategy during zoning reform conversations.

Pictures speak louder than words. When changes can be shown in real ways that people understand, "then, I think it starts to click," planner Nolan Gray, research director for California YIMBY and author of *Arbitrary Lines*, said during an episode of the APA podcast series *People Behind the Plans*.

EMBRACE TECHNOLOGY. Countering the views of a small group of detractors means making sure supporters show up. After the pandemic, there's no excuse to not leverage video platforms, online surveys, and other means of engaging outside traditional public meetings. In Charlotte, Jaiyeoba and his team even held a drive-in engagement session during the pandemic to get planning feedback, having vehicles cluster around a stage, listen to a presentation though the stereo, and fill out forms to drop off on the way out.

RETHINK THE MEANING OF ENGAGEMENT. Public participation cannot be a bare minimum effort. Jaiyeoba chases engagement, and that means meeting people where they are and talking outside of mandatory meetings and planning processes. Knock on doors, stop by a church or community center, go to a bar—let constituents know you're one of them. That effort can help rally those in favor of reform when the time comes.

SUPPORT COMMUNITY ORGANIZING. The biggest mistake planners make, Jaiyeoba says, is spending too much time and energy trying to convince NIMBYs to accept something they're dead set against. In Arlington, for instance, NIMBY forces still pursued a lawsuit trying to overrule the change even after losing a three-year zoning reform fight.

Planners should instead focus their creative energy on people who want something different but may not be as loud. Rallying the emerging YIMBY (Yes in My Backyard) and pro-housing contingent, which has an increasingly large, organized political presence across the country, may be key to persevering in a large zoning debate. David Block, a Chicago-area developer and former planner with Evergreen Real Estate Group, says the tools of community organizing are the most effective ones he has.

"Make the case that this is something we need, this is something that we shouldn't be afraid of, this is something that would benefit the community—and here's why," he says.

While planners need to maintain a credible, neutral public stance and keep debates focused on the facts, Block believes they shouldn't shy away from being confrontational. They can be "neutral auditors to kind of shut down the worst excesses of the NIMBYs," he says.

"If people come out to public meetings, and they're saying things that are just not true ... planners can step in and say, 'Wait a minute, that's not right. You're totally exaggerating. Let's get back to facts."

As professionals engage in what can often turn into heated conversations, it's important for everyone involved in the process to remember that it's possible to disagree without being disagreeable. community." The same zoning rules had remained virtually unchanged since 1930. Brown recalls a certain graphic that overlaid areas with a greater than 70 percent white population with single-family zoning overlays, which connected the history of exclusion with present-day policies. It would become a favorite image for the pro-reform movement, which reproduced it everywhere. It showed the direct connection between zoning and inequity, and the narrative helped spark more pro-housing, YIMBY (Yes in My Backyard) sentiment that led to a large turnout at community meetings.

The report spoke about the problems the community was facing and why it had those problems in the first place, Brown says. "And I think it galvanized a lot of people in the community."

This engagement helped place zoning in a relevant context and gave people the information needed for a robust, data-driven debate. Maribojoc says that the planners showed a methodical focus, telling Arlington how it got to its current state and outlining scenarios around what would happen with and without change.

The first phase, which used the research compendium to drive engagement, really helped get citizens "on the same page" around the problem that the planners were trying to solve, Brown says. That made it easier to get actionable feedback to inform the second step—the creation of a policy proposal. The early investment helped the planning department recognize the main stakeholders and a path to consensus, which made the third step (creating specific regulatory changes) that much easier.

It also smoothed over complaints around the speed of the process—both from NIMBYs, who argued (and continue to argue) that the final proposal wasn't thorough enough and lacked proper environmental and transportation review, and the YIMBYs, who wanted more extensive upzoning.

"I do believe that they did much better than most other planning departments in other jurisdictions have done when they attempted something similar," says Adam Theo, director of communications for YIMBYs of Northern Virginia and former independent candidate for

The planners' role included taking the community pulse and arming elected officials with resources to aid in decisionmaking, says principal planner Matthew Ladd, AICP (opposite). Expanding housing choice means making room for missing middle, multifamily, and transit-oriented housing, like this condo development near a Metro stop (below).

the county board. "The county planners and the county boards were stuck with the system and processes that had been long ago established by past decision makers."

Collaboration with other county departments and stakeholders also streamlined the process. Planners solicited feedback from the county board while drafting policy proposals to better understand the legislative issues and policy concerns. There was exceptional outreach with zoning—"one of the better examples of planning and zoning working together," Vonhm says.

Exploring the equity impact

Toward the end of the process, as part of navigating community feedback, the planning

The planners showed a methodical focus, telling Arlington how it got to its current state and outlining scenarios around what would happen with and without change.





department also released a comprehensive racial and socioeconomic equity analysis, which identified the benefits and burdens of their recommendations compared with the status quo. It showed the history of county zoning policy and how expanding missing middle housing would impact opportunity for lower-income members of the community, which Brown believes really provided additional fuel for proponents, especially on the county board, to push for approval. "It's in our AICP code of ethics and Equity in Zoning Policy Guide to recognize our unique responsibility as planners to eliminate historic patterns of inequity tied to previous generations of planners," Ladd says. "I took it as a point of pride that we were able to accomplish that and fulfill my aspirational goals as a planner."

While the total number of potential new units the missing middle proposal allows only goes a short way in solving the larger housing challenge, the process breaks new ground in Arlington.

"We couldn't do the kind of widespread missing middle housing zoning amendments that were seen in cities like Portland or Minneapolis," Ladd says. "But in terms of our process, I think it's a good one to follow, and I would encourage people to look at that."

So far, neighboring counties and municipalities, including Fairfax and Loudon counties and the City of Alexandria, have done just that. Those communities have, or will soon, embark on upzoning efforts informed in part by what worked in Arlington. There's still NIMBY pushback, including a lawsuit. And one of the anti-missing middle leaders, Peter Rousselot with Arlingtonians for our Sustainable Future, said his group and many residents still oppose the decision.

But Maribojoc argues that the effort to educate the broader community is what won the day and will continue to pay dividends. This effort will lead to more successes, he argues, and since the missing middle regulations passed, even small area plans in Arlington neighborhoods have been more adventurous due to the success of the debate. The planning department continues to track the impact of the efforts, listing new units created and showcasing results, which helps build the growing case for future change.

"It is a much better plan than I think Arlington County would have gotten otherwise, if we acted just like other jurisdictions," Theo says. "I think it's safe to say Arlington County is on the forefront of missing middle reform."

Patrick Sisson, a Los Angeles-based writer and reporter focused on the tech, trends, and policies that shape cities, is a Planning contributing writer.

7 Needto-Know Trends for



A foresight-driven compass for the new year and beyond. By THE APA FORESIGHT TEAM

B LINK TWICE and something new in the world is unfolding. It's dizzying to think about, let alone remain informed about. Technological and social innovations continue to emerge and evolve. New economic trends and signals in the political arena are surfacing. And while new challenges and ever more crises keep us up at night, innovative developments promise potential solutions.

To stay a step ahead of the issues impacting the future of planning and our communities, in January APA will publish its 2024 Trend Report for Planners, in partnership with the Lincoln Institute of Land Policy. The APA Foresight team, together with APA's Trend Scouting Foresight Community, identifies existing, emerging, and potential future trends that may impact the planning profession. Planners need to understand these drivers of change, learn how they can prepare for them, and identify them when it's time to act. The report includes more than 100 trends and shows how some trends are interconnected in various future scenarios—like the future of housing in a world of hybrid work, advanced artificial intelligence (AI) capabilities and AI's potential impacts on planning decisions, and the future of climate mitigation amid current uncertainties about global collaboration and tech innovations. Some of the trends in previous reports remain relevant (and can be explored at planning.org/ foresight/trends), but there are many new ones, as well.

There also is the recognition that we are moving into a "polycrisis." The climate emergency and its close connection to current global challenges—such as food insecurity, the migrant crisis, economic warfare, resource scarcity, and social disputes highlights the high risk of failing to mitigate and adapt to climate change. Holistic approaches are needed to resolve this developing polycrisis.





You'll Work in a Bespoke Office—at Home or Downtown

S THE PANDEMIC recedes, the world of work continues to evolve. In the postpandemic U.S., a dominant trend is the adoption of a hybrid workstyle combining remote and in-office work. A 2023 Pew Research Center survey found that 41 percent of remote-capable workers now follow hybrid schedules, up from 35 percent in January 2022. During that time, the number of people working from home full time decreased from 43 to 35 percent, but this is still significantly higher than the 7 percent who worked from home pre-pandemic. Worldwide, over onethird of office desks remain unoccupied throughout the week, though Asian and European employees have returned to workplaces faster than their U.S. counterparts.

The remaining question is what the future of the office might look like. While the number of fully remote workers seems to be going down in the U.S., space for the home office or a co-working space nearby will still be needed for hybrid workers. For the companies that offer hybrid workstyles, we currently see two trends regarding the use of office space. Companies that are operating with shared offices or concierge office services tend to downsize their overall office space. Other companies emphasize collaboration and team building during their in-office time and therefore require more office space than before the pandemic to accommodate conference rooms, collaboration spaces, and space for creative activities.

Meanwhile, office-to-residential conversions are gaining interest. To further accelerate this trend, the Biden administration launched a commercial-to-residential conversion initiative in October 2023. Given these diverse directions and emerging trends, it looks like the office of the future will be fully bespoke and tailored to the customer's needs, which will vary depending on emerging workstyles. —*Petra Hurtado*, *PhD*, *and Sagar Shah*, *PhD*, *AICP*



Manufacturing is making a comeback in the U.S., supported in part by new federal incentives that focus on domestic manufacturing of crucial components such as these electric vehicle batteries being made at this Marysville, Ohio, factory.

'Made in America' Roars Back

EOPOLITICAL GOALS are becoming an increasingly deciding factor in economic policy and international trade. Self-sufficiency and independence from rival powers are resulting in an increase in friend-shoring and onshoring, financed through subsidies, a variety of policies, visa bans, and even exclusion of companies from specific markets. This includes, for example, U.S. policies toward certain high-tech products coming from China. Additionally, U.S. companies are actively seeking alternative manufacturing destinations to replace China, moving to countries such as India, Vietnam, Malaysia, and Bangladesh.

Meanwhile, manufacturing is coming back to the U.S., supported by new federal incentives to promote domestic manufacturing of crucial components, such as computer chips and electric vehicle (EV) parts. This trend has had tangible effects, with the sector adding nearly 800,000 jobs since early 2021—reaching employment levels not seen since 2008. Additionally, U.S. manufacturing employment has exceeded the peak of the previous business cycle for the first time since the late 1970s, according to jobs data from the U.S. Bureau of Labor Statistics.

But workforce challenges persist. As of March 2023, the U.S. Chamber of Commerce said there were still 693,000 open positions in the manufacturing sector—and, according to some estimates, there may be around 2.1 million unfilled jobs by 2030.

Additionally, the introduction of the Tech Hubs program—a \$500 million economic development initiative—is fostering technology hubs across the U.S., addressing regional disparities and promoting technology-driven economic growth in traditionally industrial regions. The Biden administration's initiative aims to transform 31 regions into globally competitive innovation centers. These Tech Hubs span urban and rural areas, focusing on industries such as quantum computing, biotechnology, and clean energy.

-Petra Hurtado and Sagar Shah

EXPERT INSIGHT FROM THE REPORT

'We are now entering an era of transformation in how we plan for infrastructure. It is no longer sufficient that infrastructure meets the demands of growth. Communities want to maintain existing infrastructure, but they increasingly seek to foster transformational change.'

-Bill Cesanek, AICP, CDM Smith

Car-centric Planning Drives Inequities

OCAL GOVERNMENTS and planners are overwhelmed with many emerging transportation systems popping up. While there are lots of exciting innovations in the transportation sector, the real story is that the ways cities are currently responding to these new systems are increasing inequities and harming communities. Today's more diverse transportation system needs a different approach to transportation planning—one that doesn't focus on cars.

Most new alternatives to the car are more sustainable, safer, healthier, and potentially easier to deploy in equitable ways. Usage is going up, with e-bikes on the rise in the U.S.

> for a few years (with 2022 sales topping \$1.3 billion), and the popularity of

bike-share programs and the market for cargo bikes also continuing to grow. However, cities often are unprepared for these new transportation options resulting—in some cases—to bans instead of plans to integrate them into existing systems.

Meanwhile, inequitable carcentric planning practices continue to dominate. The rising number of traffic deaths and decreasing traffic safety, coupled with the lack of appropriate infrastructure for emerging systems, show the inequity in current transportation planning. While e-mobility is a part of the solution when it comes to decarbonizing transportation (as was noted in the 2023 *Trend Report*), EVs also come with many negative effects, including the concentration of public EV chargers mostly in wealthy areas.



A more equitable approach to transportation planning, like the one in Jersey City, New Jersey, also can reduce pedestrian and bicyclist fatalities.

Assigning space by means of transportation instead of purpose isn't working anymore. A holistic, comprehensive approach toward equitable transportation planning and funding is needed. —Zhenia Dulko and Petra Hurtado

It's Time to Welcome the Robots

Robots of all shapes and sizes are entering our cities. Seoul, South Korea, has recently developed plans for a robot-friendly city, proactively envisioning the wide-ranging integration of robots into everyday life. While "personal delivery devices" that deliver packages and meals in the air and on the ground are already coming, trends point to the potential for robots and other autonomous technologies to fulfill a variety of other societal functions, from street cleaning and transit services to taking care of the very young and the elderly—a task that Liku (left) already is doing in Seoul. In nations grappling with the challenge of low birth rates, especially in Europe and Asia, the burden of care and the fulfilling of critical functions within cities may increasingly fall upon robots. With potential widespread adoption of these innovations looming, cities will need to be prepared to effectively integrate and consider them in their plans and ensure they won't disrupt accessibility of public spaces. The Urban Robotics Foundation is exploring ideas for how to do that by bringing urban stakeholders together to create solutions to integrate new technology into cities and communities. —*Senna Catenacci and Joe DeAngelis, AlCP*

LIKU

INSIGHT FROM OUR TREND SCOUTS

'As we move towards a more circular economy where we minimize taking virgin resources, will we look at our landfills and cities as resources and start to mine the urban environment for critical minerals from electronics and lithium batteries or for building materials?' —*Tanya Sakamoto, City of Calgary*

Extinct Species Get a Mammoth Rebirth

ESURRECTION BIOLOGY is centered on the revival or recreation of extinct species of plants and animals. The current destruction of the natural world, the impacts of climate change, and the steady march of ecosystem loss are leading to the rapid extinction of species across the world. Notably, resurrection biology might be critical both for bringing back long-lost species and reversing the ongoing extinction of current species.

De-extinction science relies on three different methods: cloning (using DNA of extinct species to



De-extinction science could resurrect mammoths and—more importantly, perhaps—insects.

clone new animals), back-breeding (for example, selectively breeding elephants to recreate mammoths), and gene editing (adding or removing traits from existing species' DNA to recreate extinct species). Media interest largely centers on the resurrection of mammoths, dodos, and other high-profile extinctions.

However, this

concept could be applied in more mundane but vitally important circumstances, such as insect extinctions—which are a major threat to the resilience of the global food supply and the health of ecosystems. This technology might one day help to reverse major impacts by reviving key extinct species. Planners should consider not only the long-term implications of this technology but also the ecosystem loss and the rapid species extinction occurring today that drives its continued relevancy.

—Joe DeAngelis and Petra Hurtado



Urbanist AI allows community members to co-create with planners—and participate more fully in the design of places.

Co-creation Mirrors DIY Trends

Urban dwellers are increasingly embracing do-it-yourself (DIY) methods and self-organization. A trend toward co-creation is emerging as a collaborative approach in which planners and end users jointly develop solutions. This process emphasizes deep user engagement facilitated by new technologies. Consequently, there's growing skepticism toward traditional experts and a surge in the creator economy.

Communities are becoming more proactive, self-regulated, and interconnected. Start-ups like Urbanist AI-leveraging advanced AI capabilities-are empowering users to step into the role of "citizen planners," allowing them to actively co-design their surroundings. While this makes the planning process more intricate and less predictable, it also ensures a more inclusive approach. Such technology-driven selforganization and cocreation could significantly reshape the future of the planning profession and its approaches. -Zhenia Dulko and Petra Hurtado



Climate Displacement Is on the Rise

N 2022, nearly 33 million people across the globe were displaced due to natural disasters, such as floods, drought, and wildfire, according to the Internal Displacement Monitoring Centre in Geneva. This far exceeds averages hovering near 20 million people in previous years.

In the U.S., climate displacement is a growing challenge. More than 3 million Americans lost their homes to natural disasters in 2022. As climate change continues to worsen, these numbers are expected to grow and even accelerate to more than 1 billion people by 2050. Adaptation at the local level will be critical. It will be imperative to prepare for the movement of people due to climate-related impacts and to more proactively retreat from especially high-risk areas.

Renewed discussion in the face of forced climate displacement has sought to better characterize managed retreat as a package of potential actions, rather than the wholesale abandonment of at-risk areas and the buyout of homes and properties. A June 2023 report from the University of Massachusetts Boston, together with representatives from coastal communities across the state, identified a variety of complementary tools for managed retreat, including enhanced setbacks, deed restrictions, green infrastructure, and an array of zoning and planning actions.

Yet, even as communities begin to understand the potential for these actions in concert with strategic retreat and buyout programs, continued development in hazardous areas remains the norm. In North Carolina, for example, for every buyout, 10 new homes were built in floodplains, according to a 2023 article in the *Journal of the American Planning Association*. Often, this is a result of market and insurance-based incentives that aren't pricing long-term risk into development costs and home prices. —*Scarlet Andrzejczak and Joe DeAngelis*

This article was written by members of the APA Foresight team, a part of APA's research department.



COMING SOON 2024 TREND REPORT FOR PLANNERS

Developed in partnership with the Lincoln Institute of Land Policy and the Consortium for Scenario Planning, this research can help planners guide change and create more sustainable and equitable outcomes. Read the report and learn more about APA Foresight at planning.org/foresight.



COACHMAN PARK

Clearwater, Florida

A 10,000-SQUARE-FOOT PLAYGROUND WITH SPLASH PAD, a performance venue, and space for locally created public art come together to make Clearwater's downtown Coachman Park a fun place to gather—and it's a beacon of sustainability. Located on a 24-acre stretch of redeveloped waterfront, the urban park was designed by Stantec with a green future top-of-mind. Features—including bioswales, electric vehicle charging stations, native plants, and solar panels—will make the park climate-positive, achieving net zero emissions after 20 years. After that, it will sequester more carbon than it produces. The park gives residents a new opportunity to appreciate the city's natural amenities, and because planners took sea level rise into account, this waterfront space will be enjoyed by generations to come.

An illuminated splash pad lights up the eyes of youngsters and their caregivers. It's part of the oceanthemed playground at Clearwater's Coachman Park. (Got a climate win-win that makes your Community Green? Tell us about it: email mstromberg@ planning.org.)

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