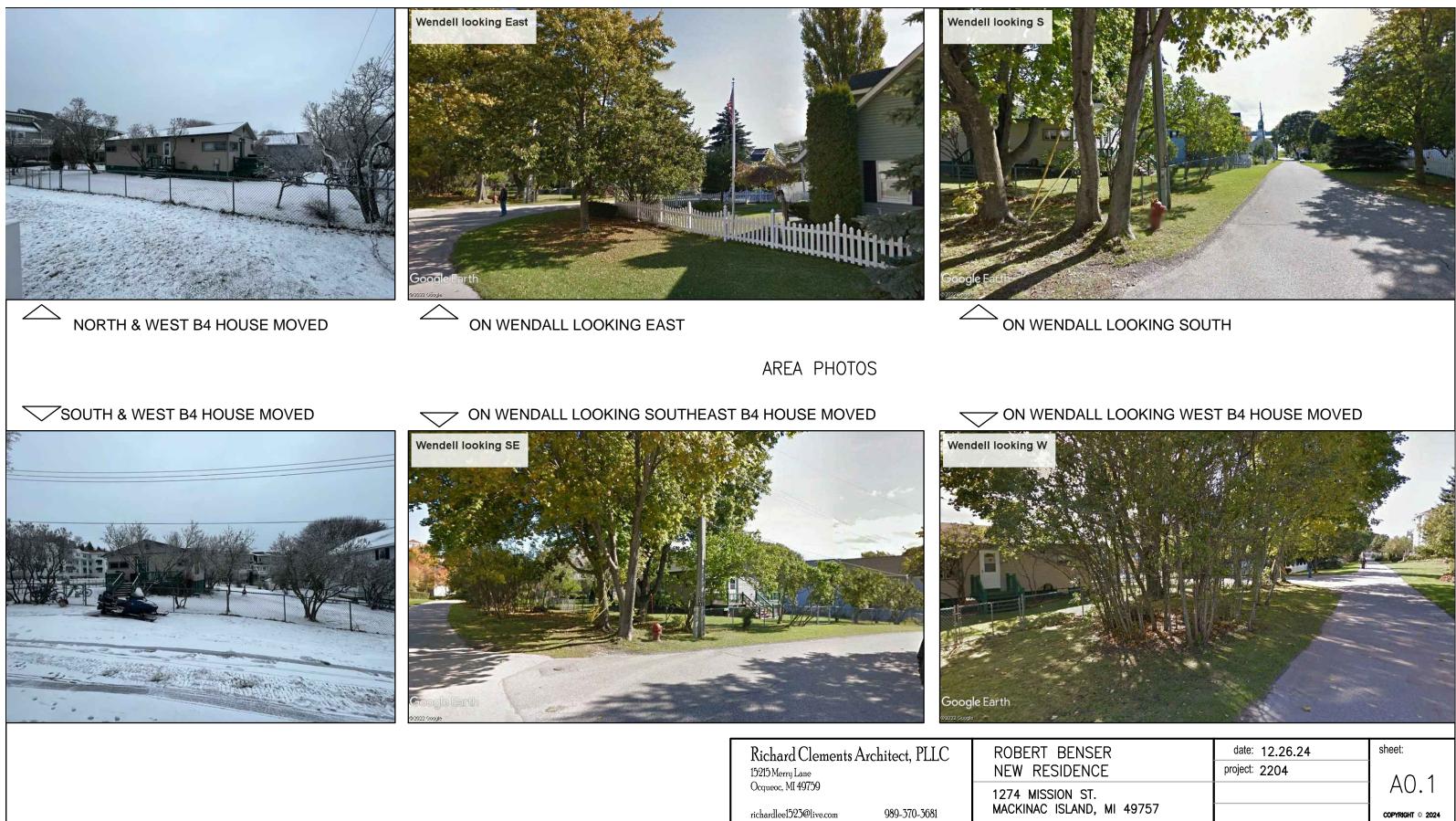
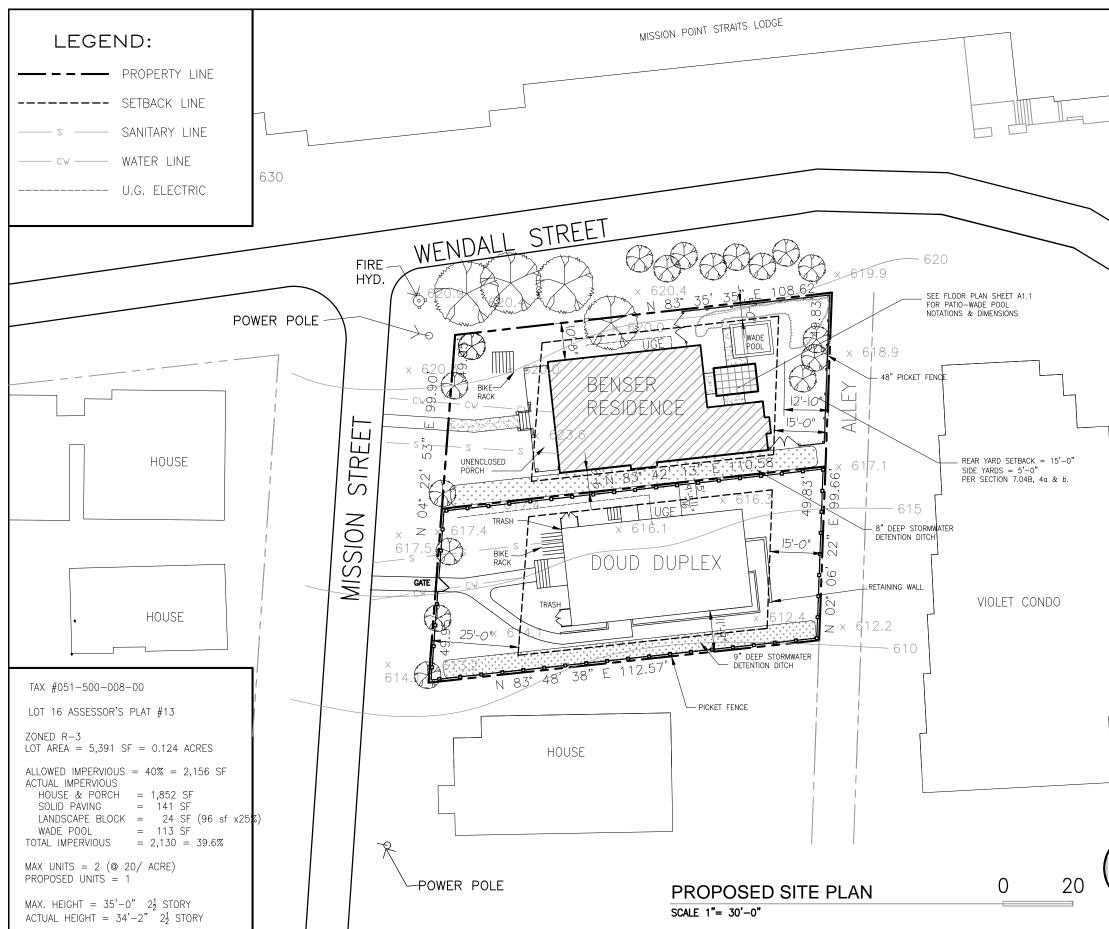


| NSER         | date: 12.26.24 | sheet:           |
|--------------|----------------|------------------|
| NCE          | project: 2204  |                  |
| ST.          |                | AU.U             |
| ND, MI 49757 |                | Copyright © 2024 |



| NSER         | date: 12.26.24 | sheet:           |
|--------------|----------------|------------------|
| ENCE         | project: 2204  |                  |
| ST.          |                | AU. I            |
| ND, MI 49757 |                | Copyright © 2024 |



| BENSER STORMWATER PLAN:         DESIGN CRITERIA:         10 YEAR 24 HOUR RAINFALL = 3.3"         (SOURCE: MDOT MS4 REPORT)         = (0.28') = 0.011' /hour         INFILTRATION RATE OF SOIL = 0.2"/hr.         (SOURCE: USDA) = 0.016'/hour x24 hrs. *         67% = 0.25' / storm event         DESIGN STORM VOLUME = 2,130 s.f.         IMPERVIOUS x 0.28' = 597 cu. ft.         APSORPTION AREA OF 6.5' STRIP AROUND         PERIMETER OF BUILDING = 1315 s.f. x 0.25'         = 328 cu. ft.         STORM WOLUME minus ABSORPTION =         REQUIRED DETENTION;         596 cu. ft 328 cu. ft. = 268 cu. ft. TO         BE DETAINED.         DETENTION INTERCEPTION BASIN 8" DEEP AT         SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x         § = 303 cu. ft. > 268 cu. ft.         SITE NOTES:         1. BICYCLE PARKING RACK IS PROVIDED AT         A RATE OF 1 PER BEDROOM + 2         VISITORS. (6 TOTAL)         2. TRASH TO BE HELD WITHIN THE         RESIDENCE AND SET CURBSIDE ON         COLLECTION DAYS         3. LIGHTING – NO AREA LIGHTING         PROPOSED. COACH LIGHTING PROVIDED         AT BUILDING ENTRANCES SHEILED TO         CONFINE LIGHT WITHIN THE SITE.         4. SEE STORMWATER NOTES THIS SHEET |
|--|
| <ul> <li>10 YEAR 24 HOUR RAINFALL = 3.3"<br/>(SOURCE: MDOT MS4 REPORT)<br/>= (0.28') = 0.011' /hour</li> <li>INFILTRATION RATE OF SOIL = 0.2"/hr.<br/>(SOURCE: USDA) = 0.016'/hour x24 hrs. *<br/>67% = 0.25' / storm event</li> <li>DESIGN STORM VOLUME = 2,130 s.f.<br/>IMPERVIOUS x 0.28' = 597 cu. ft.</li> <li>APSORPTION AREA OF 6.5' STRIP AROUND<br/>PERIMETER OF BUILDING = 1315 s.f. x 0.25'<br/>= 328 cu. ft.</li> <li>STORM VOLUME minus ABSORPTION =<br/>REQUIRED DETENTION;<br/>596 cu. ft 328 cu. ft. = 268 cu. ft. TO<br/>BE DETAINED.</li> <li>DETENTION INTERCEPTION BASIN 8" DEEP AT<br/>SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br/>§ = 303 cu. ft. &gt; 268 cu. ft.</li> <li>SITE NOTES:</li> <li>1. BICYCLE PARKING RACK IS PROVIDED AT<br/>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>2. TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>3. LIGHTING - NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHEILDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>4. SEE STORWWATER NOTES THIS SHEET</li> <li>Richard Clements Architect, PLLC</li> </ul>  |
| <ul> <li>(SOURCE: USDA) = 0.016'/hour x24 hrs. *<br/>67% = 0.25' / storm event</li> <li>DESIGN STORM VOLUME = 2,130 s.f.<br/>IMPERVIOUS x 0.28' = 597 cu. ft.</li> <li>APSORPTION AREA OF 6.5' STRIP AROUND<br/>PERIMETER OF BUILDING = 1315 s.f. x 0.25'<br/>= 328 cu. ft.</li> <li>STORM VOLUME minus ABSORPTION =<br/>REQUIRED DETENTION;<br/>596 cu. ft 328 cu. ft. = 268 cu. ft. TO<br/>BE DETAINED.</li> <li>DETENTION INTERCEPTION BASIN 8" DEEP AT<br/>SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br/>§ = 303 cu. ft. &gt; 268 cu. ft.</li> <li>SITE NOTES:</li> <li>1. BICYCLE PARKING RACK IS PROVIDED AT<br/>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>2. TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>3. LIGHTING – NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHEILDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>4. SEE STORMWATER NOTES THIS SHEET</li> <li>Richard Clements Architect, PLLC</li> </ul>   |
| <ul> <li>IMPERVIOUS x 0.28' = 597 cu. ft.</li> <li>APSORPTION AREA OF 6.5' STRIP AROUND<br/>PERIMETER OF BUILDING = 1315 s.f.</li> <li>STORMWATER ABSORPTION = 1315 s.f. x 0.25'<br/>= 328 cu. ft.</li> <li>STORM VOLUME minus ABSORPTION =<br/>REQUIRED DETENTION;<br/>596 cu. ft 328 cu. ft. = 268 cu. ft. TO<br/>BE DETAINED.</li> <li>DETENTION INTERCEPTION BASIN 8" DEEP AT<br/>SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br/>3 = 303 cu. ft. &gt; 268 cu. ft.</li> <li>SITE NOTES:</li> <li>BICYCLE PARKING RACK IS PROVIDED AT<br/>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>LIGHTING - NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHEILDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>SEE STORMWATER NOTES THIS SHEET</li> </ul>  |
| <ul> <li>PERIMETER OF BUILDING = 1315 s.f.</li> <li>STORMWATER ABSORPTION = 1315 s.f. x 0.25'<br/>= 328 cu. ft.</li> <li>STORM VOLUME minus ABSORPTION =<br/>REQUIRED DETENTION;<br/>596 cu. ft 328 cu. ft. = 268 cu. ft. TO<br/>BE DETAINED.</li> <li>DETENTION INTERCEPTION BASIN 8" DEEP AT<br/>SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br/>3 = 303 cu. ft. &gt; 268 cu. ft.</li> <li>SITE NOTES: <ol> <li>BICYCLE PARKING RACK IS PROVIDED AT<br/>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>LIGHTING - NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHELLDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>SEE STORMWATER NOTES THIS SHEET</li> </ol> </li> </ul>   |
| <ul> <li>= 328 cu. ft.</li> <li>STORM VOLUME minus ABSORPTION =<br/>REQUIRED DETENTION;<br/>596 cu. ft 328 cu. ft. = 268 cu. ft. TO<br/>BE DETAINED.</li> <li>DETENTION INTERCEPTION BASIN 8" DEEP AT<br/>SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br/>3 = 303 cu. ft. &gt; 268 cu. ft.</li> <li>SITE NOTES: <ol> <li>BICYCLE PARKING RACK IS PROVIDED AT<br/>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>LIGHTING - NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHEILDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>SEE STORMWATER NOTES THIS SHEET</li> </ol> </li> </ul>  |
| REQUIRED DETENTION;<br>596 cu. ft 328 cu. ft. = 268 cu. ft. TO<br>BE DETAINED.<br>DETENTION INTERCEPTION BASIN 8" DEEP AT<br>SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br>$\frac{2}{3}$ = 303 cu. ft. > 268 cu. ft.<br>SITE NOTES:<br>1. BICYCLE PARKING RACK IS PROVIDED AT<br>A RATE OF 1 PER BEDROOM + 2<br>VISITORS. (6 TOTAL)<br>2. TRASH TO BE HELD WITHIN THE<br>RESIDENCE AND SET CURBSIDE ON<br>COLLECTION DAYS<br>3. LIGHTING - NO AREA LIGHTING<br>PROPOSED. COACH LIGHTING PROVIDED<br>AT BUILDING ENTRANCES SHELLDED TO<br>CONFINE LIGHT WITHIN THE SITE.<br>4. SEE STORMWATER NOTES THIS SHEET<br>Richard Clements Architect, PLLC   |
| SOUTH SIDE OF BUILDING = 680 s.f. x0.67 x<br>3 = 303 cu. ft. > 268 cu. ft.<br>SITE NOTES:<br>1. BICYCLE PARKING RACK IS PROVIDED AT<br>A RATE OF 1 PER BEDROOM + 2<br>VISITORS. (6 TOTAL)<br>2. TRASH TO BE HELD WITHIN THE<br>RESIDENCE AND SET CURBSIDE ON<br>COLLECTION DAYS<br>3. LIGHTING - NO AREA LIGHTING<br>PROPOSED. COACH LIGHTING PROVIDED<br>AT BUILDING ENTRANCES SHEILDED TO<br>CONFINE LIGHT WITHIN THE SITE.<br>4. SEE STORMWATER NOTES THIS SHEET<br>Richard Clements Architect, PLLC  |
| <ol> <li>BICYCLE PARKING RACK IS PROVIDED AT<br/>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>LIGHTING - NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHEILDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>SEE STORMWATER NOTES THIS SHEET</li> <li>Richard Clements Architect, PLLC</li> </ol>  |
| <ul> <li>A RATE OF 1 PER BEDROOM + 2<br/>VISITORS. (6 TOTAL)</li> <li>2. TRASH TO BE HELD WITHIN THE<br/>RESIDENCE AND SET CURBSIDE ON<br/>COLLECTION DAYS</li> <li>3. LIGHTING - NO AREA LIGHTING<br/>PROPOSED. COACH LIGHTING PROVIDED<br/>AT BUILDING ENTRANCES SHEILDED TO<br/>CONFINE LIGHT WITHIN THE SITE.</li> <li>4. SEE STORMWATER NOTES THIS SHEET</li> <li>Richard Clements Architect, PLLC</li> </ul>   |
| RESIDENCE AND SET CURBSIDE ON<br>COLLECTION DAYS<br>3. LIGHTING – NO AREA LIGHTING<br>PROPOSED. COACH LIGHTING PROVIDED<br>AT BUILDING ENTRANCES SHEILDED TO<br>CONFINE LIGHT WITHIN THE SITE.<br>4. SEE STORMWATER NOTES THIS SHEET<br>Richard Clements Architect, PLLC   |
| PROPOSED. COACH LIGHTING PROVIDED<br>AT BUILDING ENTRANCES SHEILDED TO<br>CONFINE LIGHT WITHIN THE SITE.<br>4. SEE STORMWATER NOTES THIS SHEET<br>Richard Clements Architect, PLLC   |
| Richard Clements Architect, PLLC   |
| · · · · · · · · · · · · · · · · · · ·  |
| Ocqueoc, MI 49759  |
| richardlee1523@live.com 989-370-3681   |
| ROBERT BENSER<br>NEW RESIDENCE   |
| 1274 MISSION ST.<br>MACKINAC ISLAND, MI 49757  |
|  |
|  |
| date:         Dec.         26,         2024           date:         July         29,         2024  |
| date: June 23, 2024  |
| project: 2205  |
|  |

