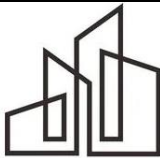
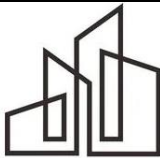


| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

INFORME LEVANTAMIENTO TOPOGRÁFICO PARA EL PROYECTO BPIN
20220214000041 REPOSICIÓN DE CUBIERTA EN LA INSTITUCIÓN EDUCATIVA
AGRICOLA DE ARGELIA SEDE PRINCIPAL, NIÑAS, GABRIEL GARCIA MÁRQUEZ,
CENTRO DE JÓVENES E INSTITUCIÓN EDUCATIVA BOTAFOGO MUNICIPIO DE
ARGELIA, CAUCA - ARGELIA (CAUCA)



ARGELIA, NOVIEMBRE DE 2022

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

1 INTRODUCCIÓN

El presente informe tiene como objeto describir el procedimiento realizado para realizar los levantamientos topográficos de las 5 sedes educativas: INSTITUCIÓN EDUCATIVA AGRICOLA DE ARGELIA SEDE PRINCIPAL, NIÑAS, GABRIEL GARCIA MÁRQUEZ, CENTRO DE JÓVENES E INSTITUCIÓN EDUCATIVA BOTAFOGO, todo, con la finalidad de brindar información precisa para los demás estudios encaminados en realizar la consultoría de reposición de cubiertas en las sedes educativas mencionadas.

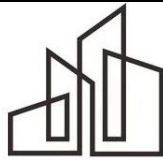
El presente informe describirá la metodología topográfica utilizada para realizar el cierre de las poligonales como también la descripción de recurso humano empleado como también los equipos de precisión utilizados.

2. OBJETIVOS

- 1) Realizar la Georeferenciación mediante navegador GPS y levantamiento topográfico, correspondiente a la zona de trabajo descrita con anterioridad, tomando todos los accidentes topográficos que se encuentran sobre la zona en estudio como son pozos, postes, vías, sardineles, cajas, árboles, cerramientos, sardineles, válvulas, y todos los detalles relevantes e inherentes al proyecto.
- 2) Aplicar conocimientos básicos de topografía para la generación de información primaria usando equipos de última tecnología (navegador GPS Topográficos, Estaciones Topográficas totales de alta precisión).
- 3) Hacer los amarres en coordenadas y cota a la red geodésica del IGAC, y la edición de planos topográficos definitivos a su respectiva escala dependiendo el tipo de estudio y diseño a realizar.
- 4) Definir con precisión el área de cubiertas objeto de reposición.
- 5) Realizar el levantamiento arquitectónico detallado de los edificios contemplados dentro del estudio, y generar la información arquitectónica en 3d

ARQUITECTURA E INGENIERÍA

MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022



ARQUITECTURA E INGENIERÍA

**CONSULTOR:
ARQUITECTA GINNA
LICETH DAZA ORDÓÑEZ**

**INFORME ESTRUCTURAL
CUBIERTA I.E. GABRIEL GARCIA
MARQUEZ**

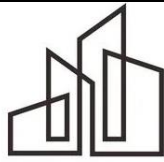
2 LOCALIZACIÓN

Las sedes educativas se encuentran ubicadas en la cabecera de Argelia Cauca, a excepción de la INSTITUCIÓN EDUCATIVA BOTAFOGO que se encuentra ubicada en el corregimiento de Botafogo, del municipio de Argelia, Cauca. En la figura siguiente se presenta la localización general del sitio de estudio.



Ilustración 1: Localización general sitio de estudio

MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022



ARQUITECTURA E INGENIERÍA

**CONSULTOR:
ARQUITECTA GINNA
LICETH DAZA ORDÓÑEZ**

**INFORME ESTRUCTURAL
CUBIERTA I.E. GABRIEL GARCIA
MARQUEZ**

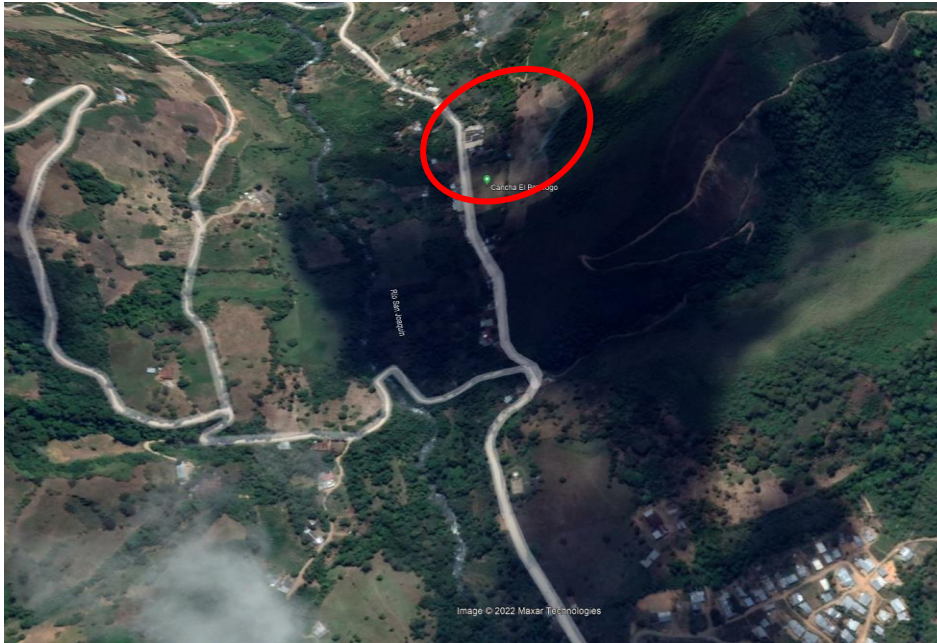
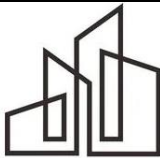


Imagen Satelital Institución Educativa Botafogo



Imagen Satelital ITA SEDE PPAL; SEDE NIÑAS, CENTRO JÓVENES Y GABRIEL GARCÍA MÁRQUEZ

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

Dentro de la zona de trabajo en estudio existen bastantes detalles como cerramientos, alcantarillas, postes, sumideros, cunetas, mobiliario urbano, cerramientos, cajas, pozos, postes, y otros elementos que fueron tomados muy detalladamente para ser incorporados como elementos existentes del proyecto.

También dentro de la toma topográfica se tuvo cuenta el borde de las vías y los sardineles, perímetros de construcciones existentes, zonas duras, zonas verdes, pues es de suma importancia conocer con precisión y detalle las cotas (niveles) de dichos elementos para realizar un buen diseño arquitectónico y diseño geométrico.

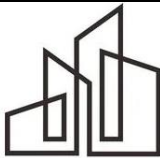
3. PERSONAL Y EQUIPO

Para el desarrollo de las actividades de campo, se conformó una (1) comisión de topografía a cuya cabeza estuvo la arquitecta Ginna Daza Ordóñez que tuvo a su cargo el traslado de coordenadas hasta el sitio de trabajo, tomando como base la información topográfica existente a la fecha. La comisión de trabajo se conformó por el siguiente personal y equipo:

Un (1) Ingeniero Civil
Un (1) topógrafo
Un (1) cadenero
Un (1) Dibujante

3.1 EQUIPO DE TRABAJO

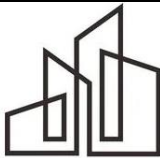
- 1) Una (1) estación topográfica (STONEX REFERENCIA R1-PLUS serie. DL11525)
- 2) Un (1) navegador GPS, marca Garmin
- 3) Distanciómetro Laser BOSCH, para exteriores, cintas métricas y Flexómetros.
- 4) Accesorios Complementarios (Radiotransmisores, machete, estacas, puntillas, pica, barra, flexómetro, indumentaria de seguridad, etc.)
- 5) Un (1) vehículo

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

4. LEVANTAMIENTO TOPOGRÁFICO

Los levantamientos topográficos se hicieron con la ESTACIÓN TOTAL TOPOGRÁFICA descrita en el numeral anterior, mediante el sistema operativo del mismo equipo que se asemeja al procedimiento de azimútes directos, el cual mediante el sistema coordinado del equipo, alimentado desde la primera estación con la información arrojada del navegador GPS descrito anteriormente, se procedió a hacer lectura mediante la localización del bastón con prisma en todos los sitios de interés, cabe anotar que en los casos de mediciones remotas se empleó la lectura sin prisma.

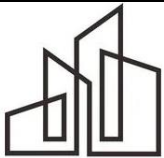


| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|---|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

4.1 CARTERAS TOPOGRÁFICAS

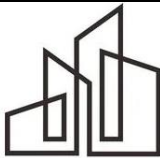
CARTERA TOPOGRÁFICA DE COORDENADAS CENTRO JÓVENES

| CARTERA DE CAMPO DEPARTAMENTO DEL CAUCA MUNICIPIO DE ARGELIA LEVANTAMIENTO TOPOGRAFICO ESTRUCTURAS PARA CUBIERTA DEL CENTRO DE JOVENES | | | | | |
|---|-------------|---|-----------|-------------|---------------------|
| ESTADO DEL TIEMPO | | SOLEADO | | EQUIPO | STONEX R1 PLUS 300m |
| REALIZO | | TOP: YERSON SANDOVAL MP: 01-19087 CPNT | | | |
| PUNTO | COORDENADAS | | | DESCRIPCION | |
| | NORTE | ESTE | COTA | | |
| 1 | 740978,823 | 981031,566 | 1290 | DEL 1 | |
| 2 | 740980,4563 | 981031,566 | 1290,094 | NORTE | |
| 3 | 740978,862 | 981028,6651 | 1290,034 | PARMNT | |
| 4 | 740980,2787 | 981029,4009 | 1290,0176 | COLMN | |
| 5 | 740978,2823 | 981034,7915 | 1290,0025 | COLMN | |
| 6 | 740975,8679 | 981040,9305 | 1290,001 | COLMN | |
| 7 | 740974,1739 | 981040,4381 | 1290,0059 | PARMNT | |
| 8 | 740991,5226 | 981034,0322 | 1290,7482 | VIA | |
| 9 | 740996,3482 | 981035,6657 | 1291,0858 | VIA | |
| 10 | 740992,3407 | 981045,9854 | 1292,2751 | VIA | |
| 11 | 740997,3182 | 981045,178 | 1292,4506 | VIA | |
| 12 | 740987,1632 | 981042,9048 | 1290,9754 | ENT | |
| 13 | 740988,3856 | 981040,3713 | 1290,9805 | ENT | |
| 14 | 740967,8733 | 981023,6811 | 1289,8299 | PARMNT | |
| 15 | 740963,0177 | 981035,6172 | 1289,882 | PARMNT | |
| 16 | 740965,6488 | 981029,2161 | 1290,8033 | PARMNT | |

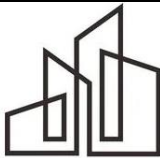
| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

CARTERA TOPOGRÁFICA DE COORDENADAS SEDE EDUCATIVA BOTAFOGO

| CARTERA DE CAMPO DEPARTAMENTO DEL CAUCA MUNICIPIO DE ARGELIA LEVANTAMIENTO TOPOGRAFICO ESTRUCTURAS PARA CUBIERTA DE LA ESCUELA DE BOTAFOGO | | | | | |
|--|-------------|---|-----------|--------|---------------------|
| ESTADO DEL TIEMPO | | SOLEADO | | EQUIPO | STONEX R1 PLUS 300m |
| REALIZO | | TOP: YERSON SANDOVAL MP: 01-19087 CPNT | | | |
| PUNTO | COORDENADAS | | | | DESCRIPCION |
| | NORTE | ESTE | COTA | | |
| 1 | 743403,692 | 982155,808 | 1201 | | DEL 1 |
| 2 | 743414,9471 | 982155,808 | 1198,877 | | NORTE |
| 3 | 743393,5846 | 982139,8499 | 1200,3303 | | VIA |
| 4 | 743396,715 | 982136,4666 | 1200,216 | | VIA |
| 5 | 743400,0995 | 982138,3039 | 1200,6497 | | POSTE |
| 6 | 743401,4466 | 982140,8995 | 1199,9432 | | VIA |
| 7 | 743397,7892 | 982144,8904 | 1200,0153 | | VIA |
| 8 | 743404,1147 | 982151,3752 | 1199,5365 | | VIA |
| 9 | 743408,1583 | 982147,9128 | 1199,4667 | | VIA |
| 10 | 743415,4235 | 982155,7679 | 1198,9754 | | VIA |
| 11 | 743411,3938 | 982159,3755 | 1198,8687 | | VIA |
| 12 | 743422,6617 | 982174,8546 | 1198,0043 | | VIA |
| 13 | 743363,7099 | 982099,1934 | 1203,3083 | | POSTE |
| 14 | 743417,9478 | 982174,1456 | 1199,966 | | CERR |
| 15 | 743404,8068 | 982158,6439 | 1200,8733 | | ENT |
| 16 | 743402,7078 | 982156,0858 | 1201,0135 | | ENT |
| 17 | 743393,9669 | 982145,888 | 1201,3787 | | CERR |
| 18 | 743414,535 | 982174,848 | 1200,455 | | PARMNT |
| 19 | 743410,6856 | 982168,8774 | 1200,5163 | | PARMNT |
| 20 | 743408,7412 | 982166,0082 | 1200,5481 | | PARMNT |
| 21 | 743404,5456 | 982159,9359 | 1200,9347 | | PARMNT |
| 22 | 743393,1709 | 982164,0924 | 1201,0563 | | PARMNT |
| 23 | 743388,4498 | 982167,2959 | 1201,1123 | | PARMNT |
| 24 | 743381,484 | 982171,6363 | 1201,0367 | | LOSA |
| 25 | 743396,2239 | 982163,6695 | 1200,849 | | DEL 2 |
| 26 | 743398,6508 | 982163,8319 | 1200,8544 | | PARMNT |

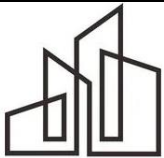
| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

| | | | | |
|----|-------------|-------------|-----------|---------|
| 27 | 743394,8398 | 982163,1838 | 1200,9993 | COLMN |
| 28 | 743395,3716 | 982163,185 | 1201,011 | COLMN |
| 29 | 743397,656 | 982167,2995 | 1200,9781 | COLMN |
| 30 | 743400,2558 | 982171,4029 | 1200,9498 | COLMN |
| 31 | 743398,5892 | 982172,7445 | 1200,992 | PARMNT |
| 32 | 743402,7333 | 982169,9586 | 1200,9607 | PARMNT |
| 33 | 743401,9645 | 982161,0006 | 1200,9195 | HIDRA |
| 34 | 743402,041 | 982161,501 | 1201,0111 | AC ELEC |
| 35 | 743400,2687 | 982176,0399 | 1200,7673 | PARMNT |
| 36 | 743390,2214 | 982177,6727 | 1201,0489 | DEL 3 |
| 37 | 743400,3063 | 982175,6486 | 1200,7718 | PARMNT |
| 38 | 743400,4476 | 982175,9319 | 1200,7829 | PARMNT |
| 39 | 743404,0767 | 982181,9037 | 1200,5954 | PARMNT |
| 40 | 743403,5449 | 982181,1631 | 1200,5758 | PARMNT |
| 41 | 743405,4203 | 982172,2093 | 1200,5714 | PARMNT |
| 42 | 743393,8873 | 982175,8927 | 1200,9293 | PARMNT |
| 43 | 743391,3997 | 982181,8989 | 1201,0676 | PARMNT |
| 44 | 743394,7158 | 982186,7909 | 1200,9567 | PARMNT |
| 45 | 743390,709 | 982180,6536 | 1201,0732 | COLMN |
| 46 | 743388,8831 | 982180,5624 | 1201,0591 | BANO |
| 47 | 743387,7334 | 982181,3142 | 1201,1927 | BANO |
| 48 | 743388,4423 | 982179,8873 | 1201,0786 | LOSA |
| 49 | 743387,1778 | 982180,7211 | 1201,0578 | LOSA |
| 50 | 743381,9047 | 982172,4699 | 1201,0974 | LOSA |
| 51 | 743388,1919 | 982167,7841 | 1201,1017 | LOSA |
| 52 | 743393,4344 | 982176,063 | 1201,028 | LOSA |
| 53 | 743393,0831 | 982176,266 | 1201,0548 | LOSA |
| 54 | 743394,4014 | 982178,3309 | 1201,0267 | LOSA |
| 55 | 743391,5285 | 982180,3087 | 1201,066 | LOSA |
| 56 | 743366,526 | 982189,2282 | 1202,9103 | PARMNT |
| 57 | 743370,806 | 982185,0028 | 1202,8991 | PARMNT |
| 58 | 743364,9178 | 982179,5678 | 1202,8839 | PARMNT |
| 59 | 743358,9202 | 982174,2255 | 1202,8648 | PARMNT |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

CARTERA TOPOGRÁFICA DE COORDENADAS SEDE GABRIEL GARCÍA MÁRQUEZ

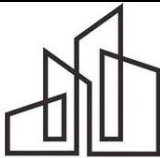
| CARTERA DE CAMPO DEPARTAMENTO DEL CAUCA MUNICIPIO DE ARGELIA LEVANTAMIENTO TOPOGRAFICO ESTRUCTURAS PARA CUBIERTA DE LA ESCUELA GABRIEL GARCIA MARQUEZ | | | | | |
|---|-------------|---|-----------|-------------|---------------------|
| ESTADO DEL TIEMPO | | SOLEADO | | EQUIPO | STONEX R1 PLUS 300m |
| REALIZO | | TOP: YERSON SANDOVAL MP: 01-19087 CPNT | | | |
| PUNTO | COORDENADAS | | | DESCRIPCION | |
| | NORTE | ESTE | COTA | | |
| 1 | 741057,95 | 981104,831 | 1303 | DEL 1 | |
| 2 | 741064,5905 | 981104,8308 | 1302,8345 | NORTE | |
| 3 | 741073,5199 | 981087,9675 | 1301,9277 | VIA | |
| 4 | 741078,0238 | 981091,0316 | 1301,9035 | VIA | |
| 5 | 741071,6317 | 981097,2133 | 1302,3304 | VIA | |
| 6 | 741066,9569 | 981094,9197 | 1302,3811 | VIA | |
| 7 | 741061,562 | 981110,0264 | 1303,0972 | VIA | |
| 8 | 741053,3552 | 981118,8866 | 1303,6919 | VIA | |
| 9 | 741049,2305 | 981114,8979 | 1303,6576 | VIA | |
| 10 | 741071,1129 | 981098,674 | 1302,4118 | REC | |
| 11 | 741092,3606 | 981075,8953 | 1301,8472 | PST | |
| 12 | 741066,9299 | 981105,482 | 1302,7004 | PST | |
| 13 | 741048,9817 | 981125,5506 | 1304,0613 | PST | |
| 14 | 741061,9456 | 981092,8121 | 1302,1993 | PARMNT | |
| 15 | 741054,9888 | 981093,7454 | 1302,1951 | PARMNT | |
| 16 | 741045,8723 | 981078,0957 | 1301,7148 | DEL 2 | |
| 17 | 741053,8762 | 981086,3498 | 1302,0015 | PARMNT | |
| 18 | 741052,7885 | 981079,0013 | 1301,7037 | PARMNT | |
| 19 | 741051,742 | 981071,6453 | 1301,3986 | PARMNT | |
| 20 | 741050,6291 | 981064,2147 | 1300,9198 | PARMNT | |
| 21 | 741051,6113 | 981055,6168 | 1302,8651 | PARMNT | |
| 22 | 741052,2422 | 981054,7151 | 1302,8642 | PARMNT | |
| 23 | 741049,7694 | 981054,1167 | 1302,868 | PARMNT | |
| 24 | 741057,9329 | 981061,8127 | 1302,7389 | PARMNT | |
| 25 | 741040,4477 | 981046,7399 | 1300,0279 | PARMNT | |
| 26 | 741043,1717 | 981066,3751 | 1300,2265 | PARMNT | |
| 27 | 741042,3945 | 981059,6946 | 1300,0984 | PARMNT | |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

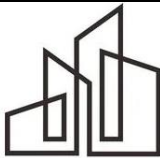
| | | | | |
|----|-------------|-------------|-----------|---------|
| 28 | 741041,3087 | 981053,3048 | 1300,0856 | PARMNT |
| 29 | 741037,132 | 981081,179 | 1301,6754 | DEL 3 |
| 30 | 741036,3224 | 981067,3695 | 1300,2389 | PARAMNT |
| 31 | 741025,0909 | 981083,6974 | 1301,0267 | PARAMNT |
| 32 | 741022,0389 | 981062,7141 | 1300,1533 | PARAMNT |
| 33 | 741021,0668 | 981056,0224 | 1300,0533 | PARAMNT |
| 34 | 741011,0084 | 981057,0122 | 1299,0001 | PARAMNT |
| 35 | 741014,1373 | 981077,9017 | 1299,572 | PARAMNT |
| 36 | 741021,3769 | 981084,7235 | 1301,0764 | PARAMNT |
| 37 | 741017,9766 | 981056,4577 | 1299,4073 | PARAMNT |
| 38 | 741036,2939 | 981077,9685 | 1301,6891 | LOSA |
| 39 | 741050,8228 | 981075,822 | 1301,7367 | LOSA |
| 40 | 741054,4045 | 981099,7351 | 1301,8698 | LOSA |
| 41 | 741040,4471 | 981101,5679 | 1301,805 | LOSA |
| 42 | 741057,682 | 981101,4663 | 1302,7748 | ENT |
| 43 | 741054,9794 | 981104,5824 | 1302,8684 | ENT |
| 44 | 741046,3528 | 981107,4827 | 1304,1406 | PST |

CARTERA TOPOGRÁFICA DE COORDENADAS SEDE ITA PRINCIPAL Y SEDE NIÑAS

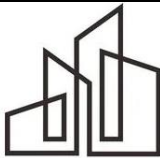
| CARTERA DE CAMPO DEPARTAMENTO DEL CAUCA MUNICIPIO DE ARGELIA LEVANTAMIENTO TOPOGRAFICO ESTRUCTURAS PARA CUBIERTA DEL ITAA | | | | |
|--|-------------|-------------|---|-------------|
| ESTADO DEL TIEMPO | | | SOLEADO | |
| EQUIPO | | | STONEX R1 PLUS 300m | |
| REALIZO | | | TOP: YERSON SANDOVAL MP: 01-19087 CPNT | |
| PUNTO | COORDENADAS | | | DESCRIPCION |
| | NORTE | ESTE | COTA | |
| 1 | 741137,741 | 980862,306 | 1305 | DEL 1 |
| 2 | 741140,2429 | 980862,306 | 1304,6018 | NORTE |
| 3 | 741127,2649 | 980887,2324 | 1305,3241 | VIA |
| 4 | 741132,4894 | 980890,2078 | 1305,5253 | VIA |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

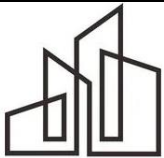
| | | | | |
|----|-------------|-------------|-----------|-----------|
| 5 | 741135,286 | 980883,0219 | 1305,4152 | VIA |
| 6 | 741129,6548 | 980881,0621 | 1305,1599 | VIA |
| 7 | 741132,0512 | 980884,0944 | 1305,3102 | REC |
| 8 | 741136,6908 | 980881,2756 | 1305,6405 | POSTE |
| 9 | 741137,3035 | 980872,124 | 1305,1922 | VIA |
| 10 | 741131,3824 | 980871,4709 | 1305,0202 | SUMI |
| 11 | 741132,3717 | 980871,5122 | 1305,0679 | SUMI |
| 12 | 741132,4541 | 980869,5917 | 1305,0579 | SUMI |
| 13 | 741131,5363 | 980869,5421 | 1305,0346 | SUMI |
| 14 | 741131,6938 | 980865,5234 | 1305,0209 | VIA |
| 15 | 741137,6835 | 980865,5276 | 1305,0864 | VIA |
| 16 | 741136,1812 | 980864,6322 | 1305,0789 | RFC |
| 17 | 741134,141 | 980857,9036 | 1304,9905 | RFC |
| 18 | 741132,0168 | 980854,5405 | 1305,0458 | VIA |
| 19 | 741137,9556 | 980855,4984 | 1304,8822 | VIA |
| 20 | 741134,0161 | 980837,6795 | 1304,9158 | VIA |
| 21 | 741139,9435 | 980838,2066 | 1304,8469 | VIA |
| 22 | 741134,2041 | 980835,9948 | 1304,8975 | SUMH |
| 23 | 741133,1683 | 980835,2345 | 1304,8655 | SUMH |
| 24 | 741133,4701 | 980833,6554 | 1304,8714 | SUMH |
| 25 | 741134,5796 | 980833,2032 | 1304,8591 | SUMH |
| 26 | 741135,2045 | 980828,5874 | 1304,8239 | VIA |
| 27 | 741141,0585 | 980829,7918 | 1304,8377 | VIA |
| 28 | 741140,7926 | 980833,7869 | 1304,9147 | POSTE |
| 29 | 741139,1775 | 980826,9417 | 1304,8211 | REC |
| 30 | 741138,2925 | 980823,4059 | 1304,7698 | REC |
| 31 | 741136,5648 | 980818,0523 | 1304,7126 | VIA |
| 32 | 741142,686 | 980818,7694 | 1304,8314 | VIA |
| 33 | 741143,7174 | 980803,7966 | 1304,7883 | VIA |
| 34 | 741137,7023 | 980804,1036 | 1304,622 | VIA |
| 35 | 741144,9931 | 980807,677 | 1304,5968 | PSTTRANSF |
| 36 | 741136,171 | 980813,1067 | 1304,7743 | PARAMT |
| 37 | 741133,4139 | 980832,2565 | 1305,0444 | PARAMT |
| 38 | 741133,5344 | 980832,1221 | 1306,5788 | ACOMELECT |
| 39 | 741128,9689 | 980862,9686 | 1305,545 | ENT |
| 40 | 741128,2135 | 980868,1873 | 1305,9278 | ENT |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

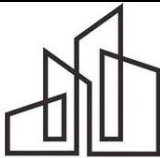
| | | | | |
|----|-------------|-------------|-----------|---------|
| 41 | 741127,8984 | 980870,7454 | 1306,3082 | COLUMNA |
| 42 | 741125,3749 | 980874,9834 | 1307,0358 | PARAMNT |
| 43 | 741124,9246 | 980887,0266 | 1307,0881 | CASA |
| 44 | 741108,9521 | 980846,0075 | 1307,8911 | DEL 2 |
| 45 | 741108,1014 | 980867,0855 | 1306,3257 | LOSA |
| 46 | 741112,9026 | 980837,6222 | 1306,1308 | LOSA |
| 47 | 741110,8788 | 980837,2829 | 1306,1278 | LOSA |
| 48 | 741111,8194 | 980831,433 | 1306,1299 | LOSA |
| 49 | 741126,2248 | 980833,8433 | 1306,1338 | LOSA |
| 50 | 741123,0863 | 980853,6769 | 1306,2061 | LOSA |
| 51 | 741129,8232 | 980854,7236 | 1306,1382 | LOSA |
| 52 | 741129,1086 | 980859,7691 | 1306,1376 | CASETA |
| 53 | 741126,216 | 980859,3565 | 1306,2065 | CASETA |
| 54 | 741126,8002 | 980861,8718 | 1306,1385 | CASETA |
| 55 | 741124,5247 | 980869,6742 | 1306,2946 | LOSA |
| 56 | 741122,4001 | 980830,2727 | 1306,1517 | PARAMNT |
| 57 | 741124,4027 | 980819,2465 | 1306,2116 | PARAMNT |
| 58 | 741115,1969 | 980817,5619 | 1306,2144 | PARAMNT |
| 59 | 741116,6499 | 980809,7938 | 1306,2332 | PARAMNT |
| 60 | 741112,8432 | 980808,8444 | 1306,2723 | PARAMNT |
| 61 | 741109,1081 | 980829,4741 | 1306,2388 | PARAMNT |
| 62 | 741112,0845 | 980829,9278 | 1306,2294 | LOSA |
| 63 | 741111,9793 | 980829,9271 | 1306,4898 | LOSA |
| 64 | 741109,1864 | 980829,5146 | 1306,5581 | LOSA |
| 65 | 741108,3789 | 980833,9366 | 1306,5699 | LOSA |
| 66 | 741110,9416 | 980836,4432 | 1306,5542 | LOSA |
| 67 | 741110,8689 | 980837,3165 | 1307,2317 | LOSA |
| 68 | 741109,6328 | 980843,8299 | 1307,2329 | LOSA |
| 69 | 741106,7859 | 980843,3367 | 1307,281 | LOSA |
| 70 | 741106,6538 | 980844,0729 | 1307,9385 | LOSA |
| 71 | 741109,4182 | 980844,4894 | 1307,9042 | LOSA |
| 72 | 741103,9857 | 980874,472 | 1307,915 | LOSA |
| 73 | 741103,4397 | 980877,3874 | 1307,8871 | LOSA |
| 74 | 741101,2766 | 980876,9617 | 1307,8871 | LOSA |
| 75 | 741103,4685 | 980877,7128 | 1308,051 | LOSA |
| 76 | 741104,9335 | 980869,2565 | 1307,9099 | LOSA |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

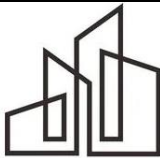
| | | | | |
|-----|-------------|-------------|-----------|---------|
| 77 | 741104,9573 | 980869,281 | 1307,9801 | LOSA |
| 78 | 741109,2418 | 980870,0307 | 1307,9747 | LOSA |
| 79 | 741108,3872 | 980868,7046 | 1307,9533 | LOSA |
| 80 | 741108,2175 | 980867,214 | 1307,9283 | LOSA |
| 81 | 741122,0109 | 980869,3722 | 1307,9167 | LOSA |
| 82 | 741121,3351 | 980870,7017 | 1307,9528 | LOSA |
| 83 | 741120,0689 | 980871,7099 | 1307,9571 | LOSA |
| 84 | 741121,6167 | 980871,9295 | 1307,9269 | LOSA |
| 85 | 741121,0883 | 980874,8182 | 1307,9646 | LOSA |
| 86 | 741115,4306 | 980873,8269 | 1307,9762 | PARAMNT |
| 87 | 741112,6461 | 980875,4612 | 1307,989 | PARAMNT |
| 88 | 741113,2195 | 980876,9891 | 1307,979 | PARAMNT |
| 89 | 741110,0055 | 980878,7331 | 1308,017 | PARAMNT |
| 90 | 741105,6429 | 980878,4622 | 1308,0435 | PARAMNT |
| 91 | 741105,5748 | 980878,8466 | 1308,0482 | PARAMNT |
| 92 | 741103,9035 | 980878,7077 | 1308,0809 | PARAMNT |
| 93 | 741105,7915 | 980870,2203 | 1307,9828 | COLM |
| 94 | 741105,8711 | 980869,8648 | 1307,9778 | COLM |
| 95 | 741105,536 | 980869,8099 | 1307,9777 | COLM |
| 96 | 741110,7564 | 980870,9817 | 1307,9727 | COLM |
| 97 | 741110,7767 | 980870,6653 | 1307,9741 | COLM |
| 98 | 741111,1546 | 980870,6999 | 1307,975 | COLM |
| 99 | 741115,8068 | 980871,7796 | 1307,9806 | COLM |
| 100 | 741115,8757 | 980871,4595 | 1307,9767 | COLM |
| 101 | 741116,2592 | 980871,5031 | 1307,9786 | COLM |
| 102 | 741109,8681 | 980877,7304 | 1308,018 | COLM |
| 103 | 741109,902 | 980877,3866 | 1308,0141 | COLM |
| 104 | 741109,5148 | 980877,3327 | 1308,0134 | COLM |
| 105 | 741104,0031 | 980878,1121 | 1308,0889 | COLM |
| 106 | 741104,057 | 980877,7562 | 1308,0534 | COLM |
| 107 | 741121,1637 | 980872,1778 | 1307,9644 | COLM |
| 108 | 741121,222 | 980871,8414 | 1307,9163 | COLM |
| 109 | 741121,5925 | 980871,9295 | 1307,9186 | COLM |
| 110 | 741100,1886 | 980843,7018 | 1307,9138 | PARAMNT |
| 111 | 741106,5138 | 980844,668 | 1307,9083 | PARAMNT |
| 112 | 741109,0674 | 980830,0521 | 1306,5626 | PARAMNT |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|---|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

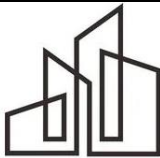
| | | | | |
|-----|-------------|-------------|-----------|---------|
| 113 | 741110,8022 | 980820,3471 | 1306,2267 | PARAMNT |
| 114 | 741112,4638 | 980811,1441 | 1306,2156 | PARAMNT |
| 115 | 741110,9625 | 980836,4466 | 1306,6771 | GRADA |
| 116 | 741110,9235 | 980836,7176 | 1306,6885 | GRADA |
| 117 | 741110,916 | 980836,7561 | 1306,8641 | GRADA |
| 118 | 741110,8653 | 980836,9948 | 1306,8704 | GRADA |
| 119 | 741110,8159 | 980837,2273 | 1307,0497 | GRADA |
| 120 | 741110,8931 | 980837,3249 | 1306,9626 | GRADA |
| 121 | 741111,4727 | 980837,4732 | 1306,9337 | GRADA |
| 122 | 741111,5079 | 980837,4651 | 1306,6742 | GRADA |
| 123 | 741112,2038 | 980837,5774 | 1306,7083 | GRADA |
| 124 | 741112,2138 | 980837,5739 | 1306,3889 | GRADA |
| 125 | 741112,8463 | 980837,6817 | 1306,3802 | GRADA |
| 126 | 741111,7409 | 980844,8709 | 1306,142 | GRADA |
| 127 | 741111,6974 | 980844,8567 | 1306,3804 | GRADA |
| 128 | 741111,028 | 980844,7115 | 1306,4057 | GRADA |
| 129 | 741110,9567 | 980844,7148 | 1306,6641 | GRADA |
| 130 | 741110,2557 | 980844,5697 | 1306,6833 | GRADA |
| 131 | 741110,2356 | 980844,5737 | 1306,9329 | GRADA |
| 132 | 741110,0862 | 980844,5466 | 1306,952 | GRADA |
| 133 | 741110,1675 | 980843,9589 | 1306,9432 | GRADA |
| 134 | 741109,6479 | 980843,8263 | 1306,9623 | GRADA |
| 135 | 741110,0458 | 980844,5613 | 1307,5271 | GRADA |
| 136 | 741110,1465 | 980843,9939 | 1307,5033 | GRADA |
| 137 | 741106,7919 | 980843,4084 | 1307,4991 | GRADA |
| 138 | 741106,7485 | 980843,627 | 1307,5071 | GRADA |
| 139 | 741106,7385 | 980843,7071 | 1307,6991 | GRADA |
| 140 | 741106,6843 | 980843,9689 | 1307,7161 | GRADA |
| 141 | 741109,4081 | 980844,4535 | 1307,7103 | GRADA |
| 142 | 741109,826 | 980844,2362 | 1307,6924 | GRADA |
| 143 | 741109,8298 | 980844,2373 | 1307,5184 | GRADA |
| 144 | 741111,4668 | 980844,8504 | 1306,4818 | GRADA |
| 145 | 741111,4213 | 980844,8227 | 1306,648 | GRADA |
| 146 | 741111,2473 | 980844,834 | 1306,6774 | GRADA |
| 147 | 741111,1915 | 980844,8012 | 1306,7956 | GRADA |
| 148 | 741110,9503 | 980844,7978 | 1306,8014 | GRADA |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|---|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

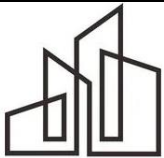
| | | | | |
|-----|-------------|-------------|-----------|-------|
| 149 | 741110,9135 | 980844,761 | 1306,985 | GRADA |
| 150 | 741110,6921 | 980844,7373 | 1306,9975 | GRADA |
| 151 | 741110,6216 | 980844,7093 | 1307,1851 | GRADA |
| 152 | 741110,4201 | 980844,691 | 1307,181 | GRADA |
| 153 | 741110,3649 | 980844,674 | 1307,3659 | GRADA |
| 154 | 741110,1375 | 980844,6389 | 1307,3751 | GRADA |
| 155 | 741110,0909 | 980844,6117 | 1307,555 | GRADA |
| 156 | 741109,8795 | 980844,6046 | 1307,5555 | GRADA |
| 157 | 741109,8673 | 980844,57 | 1307,7197 | GRADA |
| 158 | 741109,4985 | 980846,5076 | 1307,724 | GRADA |
| 159 | 741109,5263 | 980846,488 | 1307,5718 | GRADA |
| 160 | 741109,7925 | 980846,4473 | 1307,5691 | GRADA |
| 161 | 741109,8155 | 980846,4647 | 1307,3833 | GRADA |
| 162 | 741110,045 | 980846,4529 | 1307,3769 | GRADA |
| 163 | 741110,1111 | 980846,4768 | 1307,2071 | GRADA |
| 164 | 741110,3282 | 980846,54 | 1307,0165 | GRADA |
| 165 | 741110,5681 | 980846,644 | 1307,0127 | GRADA |
| 166 | 741110,6647 | 980846,6409 | 1306,8317 | GRADA |
| 167 | 741110,8694 | 980846,7211 | 1306,8214 | GRADA |
| 168 | 741110,9298 | 980846,69 | 1306,6844 | GRADA |
| 169 | 741111,1721 | 980846,7437 | 1306,6774 | GRADA |
| 170 | 741111,2117 | 980846,7663 | 1306,5173 | GRADA |
| 171 | 741109,6784 | 980855,8916 | 1306,5883 | GRADA |
| 172 | 741109,6418 | 980855,8362 | 1306,7417 | GRADA |
| 173 | 741109,4102 | 980855,862 | 1306,7386 | GRADA |
| 174 | 741109,3384 | 980855,8432 | 1306,9119 | GRADA |
| 175 | 741109,0791 | 980855,7971 | 1306,9283 | GRADA |
| 176 | 741109,0287 | 980855,7562 | 1307,0892 | GRADA |
| 177 | 741108,8034 | 980855,7494 | 1307,0916 | GRADA |
| 178 | 741108,7378 | 980855,7337 | 1307,2577 | GRADA |
| 179 | 741108,5015 | 980855,68 | 1307,2591 | GRADA |
| 180 | 741108,4221 | 980855,6572 | 1307,4127 | GRADA |
| 181 | 741108,2039 | 980855,6063 | 1307,4274 | GRADA |
| 182 | 741108,1521 | 980855,5772 | 1307,616 | GRADA |
| 183 | 741107,9073 | 980855,5904 | 1307,6192 | GRADA |
| 184 | 741107,8451 | 980855,5635 | 1307,77 | GRADA |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

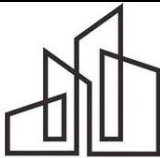
| | | | | |
|-----|-------------|-------------|-----------|---------|
| 185 | 741107,4892 | 980855,4735 | 1307,7866 | GRADA |
| 186 | 741107,182 | 980857,3912 | 1307,7997 | GRADA |
| 187 | 741107,494 | 980857,4396 | 1307,7824 | GRADA |
| 188 | 741107,5683 | 980857,4771 | 1307,6078 | GRADA |
| 189 | 741107,8393 | 980857,5184 | 1307,614 | GRADA |
| 190 | 741107,8618 | 980857,5219 | 1307,4364 | GRADA |
| 191 | 741108,1006 | 980857,5433 | 1307,4282 | GRADA |
| 192 | 741108,1306 | 980857,5763 | 1307,2638 | GRADA |
| 193 | 741108,4496 | 980857,5686 | 1307,2559 | GRADA |
| 194 | 741108,4616 | 980857,6211 | 1307,0882 | GRADA |
| 195 | 741108,7019 | 980857,6822 | 1307,0904 | GRADA |
| 196 | 741108,7348 | 980857,6853 | 1306,914 | GRADA |
| 197 | 741109,0527 | 980857,7273 | 1306,9219 | GRADA |
| 198 | 741109,0887 | 980857,7167 | 1306,7519 | GRADA |
| 199 | 741109,2999 | 980857,787 | 1306,7455 | GRADA |
| 200 | 741109,3517 | 980857,807 | 1306,595 | GRADA |
| 201 | 741108,1661 | 980866,8904 | 1306,3175 | GRADA |
| 202 | 741108,1188 | 980866,8808 | 1306,6134 | GRADA |
| 203 | 741107,5405 | 980866,7619 | 1306,6177 | GRADA |
| 204 | 741107,5171 | 980866,7446 | 1306,9396 | GRADA |
| 205 | 741106,9221 | 980866,6288 | 1306,9681 | GRADA |
| 206 | 741106,8974 | 980866,6327 | 1307,2999 | GRADA |
| 207 | 741106,2423 | 980866,5268 | 1307,3005 | GRADA |
| 208 | 741106,1954 | 980866,5168 | 1307,6471 | GRADA |
| 209 | 741105,6154 | 980866,4123 | 1307,6575 | GRADA |
| 210 | 741108,8347 | 980845,123 | 1307,917 | COLM |
| 211 | 741110,1342 | 980838,057 | 1307,2493 | COLM |
| 212 | 741111,4155 | 980830,1048 | 1306,5287 | COLM |
| 213 | 741113,0832 | 980820,7981 | 1306,216 | COLM |
| 214 | 741114,7077 | 980811,6104 | 1306,2016 | COLM |
| 215 | 741114,7721 | 980819,7889 | 1306,2143 | COLM |
| 216 | 741120,6139 | 980829,9533 | 1306,156 | COLM |
| 217 | 741096,0501 | 980842,9156 | 1307,8793 | DEL 3 |
| 218 | 741100,5561 | 980841,5442 | 1307,2933 | LIN REF |
| 219 | 741100,4953 | 980828,2768 | 1306,4756 | PARMNT |
| 220 | 741099,6071 | 980832,1561 | 1308,1131 | COLMN |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

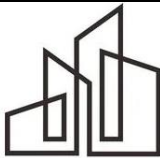
| | | | | |
|-----|-------------|-------------|-----------|--------|
| 221 | 741100,2206 | 980828,2231 | 1308,1453 | COLMN |
| 222 | 741100,8596 | 980824,279 | 1308,1388 | COLMN |
| 223 | 741101,4739 | 980820,3189 | 1308,1312 | COLMN |
| 224 | 741102,1108 | 980816,3682 | 1308,1364 | COLMN |
| 225 | 741102,7321 | 980812,4347 | 1308,1366 | COLMN |
| 226 | 741103,3425 | 980808,4496 | 1308,1292 | COLMN |
| 227 | 741101,4195 | 980807,7991 | 1308,1405 | PARMNT |
| 228 | 741100,1747 | 980815,9875 | 1308,1451 | PARMNT |
| 229 | 741098,9536 | 980823,8631 | 1308,1401 | PARMNT |
| 231 | 741097,6783 | 980831,8537 | 1308,1359 | PARMNT |
| 232 | 741097,5471 | 980832,1045 | 1308,1232 | COLMN |
| 233 | 741096,2552 | 980840,2151 | 1308,1277 | COLMN |
| 234 | 741094,9173 | 980848,4202 | 1308,1361 | COLMN |
| 235 | 741093,6932 | 980856,2277 | 1308,1659 | COLMN |
| 236 | 741090,2204 | 980863,3324 | 1308,1758 | PARMNT |
| 237 | 741091,5181 | 980855,8669 | 1308,1637 | PARMNT |
| 238 | 741092,8203 | 980847,9349 | 1308,1644 | PARMNT |
| 239 | 741094,1603 | 980839,6881 | 1308,1575 | PARMNT |
| 240 | 741095,4413 | 980831,7985 | 1308,1485 | PARMNT |
| 241 | 741095,4889 | 980831,5519 | 1308,1561 | PARMNT |
| 242 | 741089,0288 | 980869,4499 | 1308,8155 | DEL 4 |
| 243 | 741084,0103 | 980862,2752 | 1308,2004 | PARMNT |
| 244 | 741080,572 | 980884,3134 | 1310,1782 | DEL 5 |
| 245 | 741041,989 | 980915,7547 | 1319,6417 | DEL 6 |
| 246 | 741062,3161 | 980909,4927 | 1309,5822 | PARMNT |
| 247 | 741063,24 | 980910,1953 | 1309,565 | PARMNT |
| 248 | 741081,1754 | 980886,7432 | 1309,5647 | PARMNT |
| 249 | 741092,8371 | 980895,7111 | 1309,2428 | PARMNT |
| 250 | 741097,7353 | 980891,9846 | 1308,7887 | PARMNT |
| 251 | 741097,9503 | 980886,9336 | 1308,8383 | PARMNT |
| 252 | 741113,7323 | 980899,8571 | 1307,9066 | DEL 7 |
| 254 | 741114,5183 | 980892,6032 | 1308,6402 | PARMNT |
| 255 | 741114,9027 | 980889,4322 | 1308,3424 | PARMNT |
| 256 | 741117,9751 | 980889,5902 | 1308,1178 | PARMNT |
| 257 | 741118,1311 | 980886,6916 | 1307,7516 | PARMNT |
| 258 | 741089,6625 | 980899,8485 | 1309,3261 | PARMNT |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

| | | | | |
|-----|-------------|-------------|-----------|--------|
| 259 | 741062,2938 | 980920,2037 | 1309,5755 | PARMNT |
| 260 | 741066,9653 | 980923,791 | 1309,5677 | PARMNT |
| 261 | 741066,6271 | 980926,5824 | 1309,5063 | PARMNT |
| 262 | 741072,734 | 980931,1998 | 1309,2007 | PARMNT |
| 263 | 741071,3038 | 980932,9543 | 1308,9435 | PARMNT |
| 264 | 741079,2628 | 980914,2356 | 1309,4768 | DEL 8 |
| 265 | 741058,3732 | 980874,1903 | 1319,7349 | PARMNT |
| 266 | 741052,6479 | 980871,2518 | 1319,7661 | PARMNT |
| 267 | 741060,387 | 980875,4068 | 1319,7145 | COLMN |
| 268 | 741056,6833 | 980882,4031 | 1319,7304 | COLMN |
| 269 | 741052,6247 | 980889,7426 | 1319,7138 | COLMN |
| 270 | 741048,7764 | 980896,9838 | 1319,7012 | COLMN |
| 271 | 741046,8114 | 980895,934 | 1319,7157 | PARMNT |
| 272 | 741050,6207 | 980888,7727 | 1319,7606 | PARMNT |
| 273 | 741054,5786 | 980881,5375 | 1319,7451 | PARMNT |
| 280 | 741082,173 | 980894,1048 | 1309,6085 | PARMNT |
| 281 | 741088,1129 | 980901,884 | 1309,577 | COLMN |
| 282 | 741082,7699 | 980897,4164 | 1309,5656 | COLMN |
| 283 | 741078,5192 | 980902,9302 | 1309,5595 | COLMN |
| 284 | 741074,2741 | 980908,559 | 1309,5742 | COLMN |
| 285 | 741069,4037 | 980914,9125 | 1309,5649 | COLMN |
| 286 | 741065,5949 | 980919,8948 | 1309,59 | COLMN |
| 287 | 741068,5078 | 980921,8082 | 1309,5611 | COLMN |
| 288 | 741075,5657 | 980927,2512 | 1310,1003 | COLMN |
| 289 | 741074,1677 | 980929,2594 | 1310,1199 | COLMN |
| 290 | 741063,8193 | 980927,9775 | 1309,5676 | COLMN |
| 291 | 741053,336 | 980919,5215 | 1309,5835 | PARMNT |
| 292 | 741044,8155 | 980904,4388 | 1319,7235 | COLMN |
| 293 | 741040,8567 | 980911,7571 | 1319,7229 | COLMN |
| 294 | 741038,8326 | 980910,6695 | 1319,7284 | PARMNT |
| 295 | 741042,8287 | 980903,2583 | 1319,7498 | PARMNT |
| 296 | 741132,2739 | 980890,5936 | 1305,653 | VIA |
| 297 | 741126,2874 | 980889,334 | 1305,4865 | VIA |
| 298 | 741121,4074 | 980895,9777 | 1305,7098 | VIA |
| 299 | 741126,0674 | 980899,6704 | 1305,9652 | VIA |
| 300 | 741120,5903 | 980905,4356 | 1306,152 | VIA |

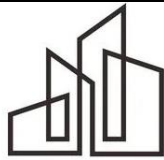
| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|--|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

| | | | | |
|-----|-------------|-------------|-----------|--------|
| 301 | 741115,8594 | 980901,7905 | 1305,99 | VIA |
| 302 | 741114,6776 | 980907,7641 | 1306,2326 | REC |
| 303 | 741112,0808 | 980913,0707 | 1306,4169 | VIA |
| 304 | 741105,9561 | 980910,2716 | 1306,4475 | VIA |
| 305 | 741103,2276 | 980912,9511 | 1306,5786 | POSTE |
| 306 | 741095,4093 | 980919,2126 | 1306,7763 | VIA |
| 307 | 741098,1928 | 980924,701 | 1306,7259 | VIA |
| 308 | 741092,1265 | 980929,6124 | 1306,7388 | VIA |
| 309 | 741089,3889 | 980924,0294 | 1306,8691 | VIA |
| 310 | 741078,9293 | 980935,0009 | 1306,782 | VIA |
| 311 | 741083,3516 | 980938,9559 | 1306,6303 | VIA |
| 312 | 741079,4723 | 980943,6209 | 1306,518 | PUENTE |
| 313 | 741076,0799 | 980941,0435 | 1306,5114 | PUENTE |
| 314 | 741076,4756 | 980951,2672 | 1306,4854 | PUENTE |
| 400 | 741118,46 | 980861,2489 | 1306,3119 | DEL 9 |
| 403 | 741122,2597 | 980869,2521 | 1311,9065 | CUB |
| 404 | 741121,1993 | 980874,8611 | 1312,9687 | CUB |
| 405 | 741105,1643 | 980866,6496 | 1311,6964 | CUB |
| 406 | 741116,8765 | 980876,5187 | 1313,1914 | MURO |
| 407 | 741115,0083 | 980877,611 | 1313,4493 | MURO |
| 408 | 741111,1911 | 980880,0154 | 1313,8811 | MURO |
| 409 | 741104,3556 | 980878,7653 | 1313,7877 | MURO |
| 410 | 741110,8988 | 980879,176 | 1311,3896 | LOSA |
| 411 | 741103,839 | 980873,9019 | 1313,0261 | CUB |
| 412 | 741101,3037 | 980878,5676 | 1313,729 | CUB |
| 413 | 741105,4714 | 980866,7017 | 1311,6607 | CERC |
| 414 | 741105,8221 | 980866,9533 | 1311,5108 | CERC |
| 415 | 741122,1142 | 980869,2408 | 1311,8701 | CERC |
| 416 | 741121,9792 | 980869,465 | 1311,7973 | CERC |
| 417 | 741121,7875 | 980869,4558 | 1311,763 | CERC |
| 418 | 741121,9787 | 980869,4619 | 1311,8016 | CERC |
| 419 | 741105,2992 | 980868,3531 | 1312,0099 | CERC |
| 420 | 741105,0166 | 980870,0466 | 1312,3146 | CERC |
| 421 | 741121,2697 | 980874,2942 | 1312,9068 | CERC |
| 422 | 741121,2713 | 980874,3045 | 1312,9004 | CERC |
| 423 | 741104,7416 | 980871,8255 | 1312,6105 | CERC |

| MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE ARGELIA CAUCA. 2022 | | |
|---|--|---|
|  ARQUITECTURA E INGENIERÍA | CONSULTOR: ARQUITECTA GINNA LICETH DAZA ORDÓÑEZ | INFORME ESTRUCTURAL CUBIERTA I.E. GABRIEL GARCIA MARQUEZ |

| | | | | |
|-----|-------------|-------------|-----------|----------|
| 424 | 741104,3403 | 980873,4519 | 1312,9064 | CERC |
| 425 | 741103,5343 | 980875,4985 | 1313,293 | CERC |
| 426 | 741101,1303 | 980876,5557 | 1313,4579 | CERC |
| 427 | 741100,8849 | 980878,3906 | 1313,819 | CERC |
| 428 | 741121,2657 | 980874,299 | 1312,8966 | CERC |
| 429 | 741119,0545 | 980875,6999 | 1313,1082 | CERC |
| 430 | 741115,8553 | 980877,1214 | 1313,4072 | CERC |
| 431 | 741114,0341 | 980878,2024 | 1313,5734 | CERC |
| 433 | 741112,7194 | 980879,18 | 1313,5346 | CERC |
| 434 | 741120,9094 | 980874,6647 | 1312,591 | CERC VER |
| 435 | 741121,8526 | 980869,3693 | 1311,7613 | CERC VER |
| 436 | 741116,663 | 980868,5536 | 1311,7115 | CERC VER |
| 437 | 741114,98 | 980877,6267 | 1313,4132 | CERC VER |
| 438 | 741109,456 | 980879,0339 | 1313,803 | CERC VER |
| 439 | 741111,6796 | 980867,6681 | 1311,6387 | CERC VER |
| 440 | 741106,2845 | 980866,9507 | 1311,3733 | CERC VER |
| 441 | 741104,1817 | 980878,7151 | 1313,4492 | CERC VER |
| 442 | 741121,5025 | 980871,8542 | 1308,6802 | ALT COLM |
| 443 | 741121,3163 | 980871,8844 | 1312,2912 | ALT COLM |
| 444 | 741115,9877 | 980871,5083 | 1308,7108 | ALT COLM |
| 445 | 741115,9889 | 980871,5026 | 1312,2954 | ALT COLM |
| 446 | 741110,5253 | 980876,2293 | 1313,0899 | ALT COLM |
| 447 | 741109,8827 | 980877,4418 | 1308,7306 | ALT COLM |
| 448 | 741111,1242 | 980870,7327 | 1308,6928 | ALT COLM |
| 449 | 741111,1265 | 980870,7298 | 1312,2794 | ALT COLM |
| 450 | 741104,399 | 980877,8583 | 1313,4732 | ALT COLM |
| 451 | 741105,7585 | 980869,9889 | 1312,3049 | ALT COLM |
| 452 | 741105,848 | 980869,9265 | 1308,7145 | ALT COLM |

**MANTENIMIENTO Y MEJORAMIENTO DE CUBIERTAS INSTITUCIONES EDUCATIVAS MUNICIPIO DE
ARGELIA CAUCA. 2022**



ARQUITECTURA E INGENIERÍA

**CONSULTOR:
ARQUITECTA GINNA
LICETH DAZA ORDÓÑEZ**

**INFORME ESTRUCTURAL
CUBIERTA I.E. GABRIEL GARCIA
MARQUEZ**

Elaboró


José Demóstenes López Bustamante
M.P. 19202-089762-CAU



ARQUITECTURA E INGENIERÍA