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### TOWN OF NEWBURGH PLANNING BOARD TECHNICAL REVIEW COMMENTS

PROJECT:

CVS PHARMACY/STORE

PROJECT NO.:

15-23

PROJECT LOCATION:

**SECTION 60, BLOCK 3, LOT 5.2** 

PROJECT REPRESENTATIVE: CUDDY & FEDER, LLP

REVIEW DATE:

**5 JANUARY 2016** 

**MEETING DATE:** 

**7 JANUARY 2016** 

- 1. City of Newburgh Flow Acceptance letter is required prior to the Town taking action on the plans.
- 2. Any update on the access and lease to the private drive to the rear of the parcel should be provided to the Planning Board.
- 3. The Applicants response regarding field testing of soil permeability is acceptable.
- 4. We continue to note that all retaining walls in excess of four feet in height must be submitted to the Town Code Enforcement Officer as engineered plans.
- 5. A condition of approval will be the execution and filling of a Stormwater Management Maintenance Agreement.
- 6. The status of the NYSDOT review of the site access drive should be discussed with the Planning Board.
- 7. The status of whether the Planning Board wishes to hold a Public Hearing should be addressed.

Respectfully submitted,

McGoey, Hauser and Edsall Consulting Engineers, D.P.C

Patrick J. Hines Principal

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December 22, 2015

Chairman John P. Ewasutyn,
And Members of the Planning Board
Town of Newburgh
308 Gardnertown Road
Newburgh, New York 12550

Re:

Proposed CVS Pharmacy/Store (Store # 10688)

Premises: Corel Place (Route 52 and Route 300), Newburgh, New York

Dear Chairman Ewasutyn and Members of the Board:

On behalf of CVS Pharmacy and its developer T.M. Crowley & Associates ("TMC"), we respectfully submit this letter and enclosures to supplement our prior site plan application submissions to the Planning Board. The intent of this submission is to resolve Planning Board comments from its December 3, 2015 meeting, as well as the remaining comments issued by the Planning Board's Engineering Consultant (McGoey, Hauser and Edsall Consulting Engineers, P.C.), and its Traffic Engineering Consultant (Creighton Manning Engineering, LLP).

Enclosed please find twelve copies of the following items in support of this application:

- Correspondence from John Canning, P.E. of Director of Transportation for VHB, dated December 11, 2015 providing detailed responses to the review comments provided by the Planning Board's Traffic Engineering Consultant, dated December 2, 2015;
- Correspondence, from Patrick N. O'Leary, P.E., Principal of VHB, dated December 17, 2015, providing detailed responses to the review comments provided by the Planning Board's Engineering Consultant, dated November 30, 2015;
- Updated project view renderings, prepared by BKA Architects, Inc., dated December 18,
   2015, providing a representative illustration of the proposed project from two views; and
- Full Sized Site Development Plans, prepared by VHB, revised through December 17, 2015, including Sheets C-1 through C-12, L-1, L-2, Sv-1, Sv-2, SL-1, TT-1 and TT-2. The Site Development Plan set also includes architectural drawings prepared by BKA Architects, Inc. as Sheets A1 and A4. Sign plans are also included at 1.1 and 1.2.

The CVS project team is in the process of obtaining a City of Newburgh flow acceptance letter. Our intention is to obtain this letter prior to the Planning Board's January 7, 2016 meeting so that

## CUDDY& FEDER<sup>III</sup>

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we can submit it to the Board at that time. We will advise the Board prior to January 7<sup>th</sup> as to the status of this letter to determine whether we should appear at the January 21<sup>st</sup> meeting.

We look forward to discussing this matter in more detail with the Planning Board at our next appearance in January, toward the Planning Board rendering a final decision.

In the interim, should the Board or its Consultants have any questions or comments, please do not hesitate to contact me. Thank you in advance for your cooperation and consideration.

Very truly yours,

Anthony F. Morando

cc: Gerald Canfield, Code Compliance Officer/Supervisor (copy enclosed)

James W. Osborne, P.E., Town Engineer (copy enclosed)

Michael H. Donnelly, Esq., Planning Board Attorney (December 22, 2015 by FedEx)

Patrick J. Hines, MHE Consulting Engineers P.C. (December 22, 2015 by FedEx)

Kenneth W. Wersted, CM Engineering, LLP (December 22, 2015 by FedEx)

Tracey Roll, TMC

Mark Grocki, P.E., VHB

Lucia Chiocchio, Esq., Cuddy & Feder, LLP



December 11, 2015

Ref: 41847.44

Mr. John Ewasutyn, Chairman Town of Newburgh Planning Board 308 Gardnertown Road Newburgh, New York 12550

Re: Response to Technical Review Comments CVS/pharmacy Section 60, Block 3, Lot 5.2

Dear Chairman Ewasutyn and Members of the Planning Board,

VHB is pleased to provide the following responses to review comments that have been received from Kenneth Wersted of Creighton Manning Engineering, LLP, dated December 2, 2015.

Comment 1: Please detail the crosswalk striping width and distance between stripes. Currently, the crosswalk along Route 52 scales to be only 4 feet wide.

Response: The crosswalk striping width and distance between stripes have been revised as per the NYSDOT standard crosswalk pavement marking detail shown on Site Details, Sheet C-12. A crosswalk width of 6 feet is provided.

Since the receipt of the VHB traffic study, the Route 300 Realty site (vacant office building on Old South Plank Rd/Rt 300) submitted an application to change the use from offices to a church. Services will mainly take place on Sunday mornings with minimal traffic expected during the weekday peak hours and Saturday peak hour. Therefore, the current traffic study represents a conservative analysis.

Response: Comment noted.

Comment 2:

Comment 3:

Please update the LOS analysis to reflect the HCM methodologies. How wide is the eastbound approach of Route 52 to Route 300? Split this distance into the left and through/right lanes as observed being used. Update the westbound Route 52 analysis to include an exclusive left turn lane (permitted lefts only) and a shared through/right lane, based on use.

50 Main Street

Suite 360

Engineers | Scientists | Planners | Designers

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**P** 914.467.6600

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#### Response:

The eastbound approach of Route 52 at the intersection with Route 300 measures 19 feet wide. The capacity analyses in the traffic study include a 10-foot wide left turn lane and a 9-foot wide through/right turn lane. The LOS analyses have been updated to reflect a westbound exclusive left-turn lane (11-feet wide), a shared through/right-turn lane (12 feet), based on use, and to reflect the HCM methodologies. The results are summarized in Tables 1 and 2 below (and copies of the analyses are appended). As indicated in the tables, whether based on the Synchro methodologies provided in the traffic study or on HCM methodologies, the proposed project will not have a significant adverse impact on area traffic operating conditions.

Table 1 - HCM Level of Service Summary (without The Loop Hudson Valley Development)

| consession and an enterior and a Kerker     | Circles de Maria | HARONON GMAN | Enter the coop ridusor |            |              |  |     |       |              |                    |             |  |     |       |  |  |
|---|------------------|--------------|------------------------|------------|--------------|--|-----|-------|--------------|--------------------|-------------|--|-----|-------|--|--|
|   |                  | CK CHTCHES   | interiored             |            | PM Pe        | ak Houi  |     |       | ibxoxox5     | Saturday Peak Hour |             |  |     |       |  |  |
| Intersection                                |                  | Lane         | Exis                   | ting       | No-I         | Build  | Bu  | iild  | Exis         | ting               | No-Build    |  | Bu  | iild  |  |  |
| . 65 (15 (15 (15 (15 (15 (15 (15 (15 (15 (1 | Approach         | Group        | LOS                    | Delay      | LOS          | Delay  | LOS | Delay | LOS          | Delay              | LOS         | Delay  | LOS | Delay |  |  |
|   | EB               | L            | D                      | 50.0       | Е            | 59.4   | E   | 69.6  | С            | 29.7               | Ç           | 29.7   | , C | 29.9  |  |  |
|   |                  | TR           | D                      | 45.1       | Ε            | 56.7   | Е   | 59.1  | С            | 28.8               | С           | 29.0   | U   | 29.0  |  |  |
|   | WB               | L            | D                      | 48.9       | E            | 55.7   | E   | 58.9  | D            | 37.9               | D           | 38.7   | D   | 38.8  |  |  |
| NY Route 52 & NY                            |                  | TR           | D                      | 40.9       | D            | 47.4   | D   | 48.4  | С            | 24.8               | С           | 24.6   | Ç   | 24.5  |  |  |
| Route 300                                   | NB               | Ļ            | D                      | 43.3       | D            | 51.0   | D   | 53.1  | D            | 36.6               | D           | 45.7   | D   | 48.8  |  |  |
| 1   |                  | TR           | С                      | 33.3       | D            | 51.5   | D   | 51.7  | С            | 24.3               | Ç           | 31.5   | C.⊢ | 32.4  |  |  |
|   | SB               | L            | D                      | 52.0       | E            | 57.8   | E   | 57.8  | С            | 32.1               | D           | 40.2   | D   | 41.0  |  |  |
|   |                  | TR           | С                      | 29.3       | D            | 37.6   | D   | 38.9  | С            | 28.1               | D           | 36.6   | D.  | 38.9  |  |  |
|   | Inter            | section      | D                      | 38.3       | D            | 49.2   | D   | 50.6  | Ç            | 27.9               | C           | 33.4   | С   | 34.6  |  |  |
| NY Route 300 & 1131                         | EB               |              |                        |            |              |  |     |       |              |                    |             |  |     |       |  |  |
| Union Ave. Driveway                         |                  | LTR          | В                      | 13.8       | В            | 14.8   | D   | 30.8  | В            | 14.6               | _ C         | 15.7   | Đ   | 30.7  |  |  |
| (unsignalized)                              | NB               |              |                        |            |              |  |     |       |              |                    | -           |  |     |       |  |  |
| (   |                  | LT           | Α                      | 9.3        | Α            | 9.6  | Α   | 9.7   | Α            | 9.6                | Α           | 9.9  | В   | 10.1  |  |  |
| NY Route 52 &                               | WB               |              |                        |            |              | e de la companya de l |     |       |              |                    |             |  |     |       |  |  |
| Proposed Site                               |                  | L            | 8-66-16                | 69ereke    | ar eli nelle |  | Α   | 8.6   |              |                    | erille Albi | ikusika:   | Α   | 8.3   |  |  |
| Driveway                                    | NB               |              |                        | in discour |              |  |     |       |              |                    |             |  |     |       |  |  |
| (unsignalized)                              |                  | LR           |                        | Nelolexo   |              |  | С.  | 20.7  | eg milit kit |                    |             | ene od co ko   | В   | 14.1  |  |  |
| 1131 Union Ave.                             | EB               |              | il de rig              |            | dinici be    | Belgs in   |     |       | ii mada et   | cija (Edga         | eracula     | 23020102   |     |       |  |  |
| Driveway & Proposed                         |                  | LT           |                        |            |              |  | Α   | 0.0   |              |                    |             | mbata sas<br>Sarcas<br>Sarcas  | Α   | 0.0   |  |  |
| Site Driveway                               | SB               |              | A const                |            |              |  |     |       |              |                    |             |  |     |       |  |  |
| (unsignalized)                              |                  | LR           | 11/11/19               |            |              |  | Α   | 8.8   |              |                    |             | a de la composição de l | Α   | 8.7   |  |  |

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Table 2 - HCM Level of Service Summary (with The Loop Hudson Valley Development)

| Table 2 - HCM Level                        | rel of Service Summary (with The Loop Hudson Valley Development)  PM Peak Hour  Saturday Peak Hour |              |     |       |  |       |  |                           |                               |                             |  |  |  |
|--|--|--------------|-----|-------|--|-------|--|---------------------------|-------------------------------|-----------------------------|--|--|--|
|  |  |              |     |       | ATTENDANTAMENTAL   |       | TOTAL NAME AND ADDRESS OF THE PARTY OF THE P | ANALASSI ANGLAS ANGLAS CA | Considered and publical list. | 55/215/5/00/2006 400 C/2000 |  |  |  |
| Intersection                               | 6.946.20   | Lane         |     | Build | AND RESERVED AND ADDRESS OF THE PARTY OF THE | ild   | TO PROPERTY AND A STATE OF THE  | Build                     | WINDS AND STREET, CO.         | iild .                      |  |  |  |
|  | Approach   | Group        | LOS | Delay | LOS  | Delay | LOS  | Delay                     | LOS                           | Delay                       |  |  |  |
|  | EB   | L            | E   | 61.0  | E  | 71.3  | D  | 40.9                      | D                             | 41.5                        |  |  |  |
|  |  | TR           | Ð   | 44.1  | D  | 45.1  | D  | 43.2                      | .D                            | 44.0                        |  |  |  |
|  | WB   | ĹŤ           | D.  | 51.7  | D  | 52.6  | D  | 50.3                      | D                             | 51.1                        |  |  |  |
| NV Davida FO G NV                          |  | R ·          | D   | 45.6  | D  | 46.5  | С  | 33.1                      | . C                           | 33.3                        |  |  |  |
| NY Route 52 & NY                           | NB   | L            | F   | 141.5 | F  | 153.9 | E  | 62.2                      | E                             | 62.2                        |  |  |  |
| Route 300                                  |  | TR           | F   | 119.6 | F  | 120.1 | D  | 40.9                      | D                             | 41.1                        |  |  |  |
|  | SB   | L            | F   | 106.8 | F  | 106.8 | D  | 53.6                      | . D                           | 53.8                        |  |  |  |
|  |  | TR           | Е   | 57.2  | E  | 60.5  | . E  | 57.0                      | E                             | 60.1                        |  |  |  |
|  | Inte   | Intersection |     | 80.8  | F.   | 83.1  | D  | 47.1                      | D                             | 48.1                        |  |  |  |
| NV Davida 200 9 1121                       | EB   |              |     |       |  |       |  |                           |                               |                             |  |  |  |
| NY Route 300 & 1131<br>Union Ave. Driveway | ,  | LTR          | С   | 15.7  | Е  | 36.7  | С  | 16.9                      | E                             | 37.7                        |  |  |  |
|  | NB   |              |     |       |  |       |  |                           |                               |                             |  |  |  |
| (unsignalized)                             |  | LT           | Α   | 9.8   | Α  | 10.0  | В  | 10.3                      | В                             | 10.4                        |  |  |  |
| NY Route 52 &                              | WB   |              |     |       |  |       |  |                           |                               |                             |  |  |  |
| <b>Proposed Site</b>                       |  | L            |     |       | Α  | 8.8   |  |                           | Α                             | 8.4                         |  |  |  |
| Driveway                                   | NB   |              |     |       |  |       |  |                           |                               |                             |  |  |  |
| (unsignalized)                             |  | LR           |     |       | С  | 22.8  |  |                           | С                             | 15.2                        |  |  |  |
| 1131 Union Ave.                            | EB   |              |     |       |  |       |  |                           |                               |                             |  |  |  |
| Driveway & Proposed                        |  | LT           |     |       | Α  | 0.0   |  |                           | Α                             | 0.0                         |  |  |  |
| Site Driveway                              | SB   |              | 4   |       |  |       | 444  |                           |                               |                             |  |  |  |
| (unsignalized)                             |  | LR           |     |       | Α  | 8.8   |  |                           | Α                             | 8.7                         |  |  |  |

**Comment 4:** The applicant has initiated the NYSDOT review process. NYSDOT has acknowledged receipt of the applicant materials and is conducting their review.

Response: Comment noted.

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We trust you will find these responses satisfactory. If you wish for additional information, please contact me at your earliest convenience.

Sincerely,

John Canning, P.E.

Director of Transportation

jcanning@vhb.com

Fnc



# **Appendix**

## Description

**HCM** Level of Service Analysis Worksheets

|   | *                                     | <b>→</b>     | 7                        | •            | <b>—</b>    | •  | 1                      | <b>†</b>           | <i>*</i>                       | <b>/</b>                                 | <del> </del> | 1   |
|---|---------------------------------------|--------------|--------------------------|--------------|-------------|--|------------------------|--------------------|--------------------------------|--|--------------|---|
| Movement  | EBL                                   | EBT          | EBR                      | WBL          | WBT         | WBR  | NBL                    | NBT                | NBR                            | SBL                                      | SBT          | SBR   |
| Lane Configurations   | 7                                     | 4            |                          | ሻ            | ₽           | and the state of t | ሻ                      | 1>                 |                                | <b>`</b>                                 | <b>}</b>     |   |
| Volume (veh/h)  | 68                                    | 225          | 197                      | 45           | 349         | 91   | 262                    | 606                | 113                            | 143                                      | 443          | 100   |
| Number  | 7                                     | 4            | 14                       | 3            | 8           | 18   | 5                      | 2                  | 12                             | 1  | 6            | 16  |
| Initial Q (Qb), veh   | 0                                     | 0            | 0                        | 0,           | 0           | 0  | 0                      | 0                  | 0                              | 0  | 0            | 0   |
| Ped-Bike Adj(A_pbT)   | 1.00                                  |              | 1.00                     | 1.00         | *******     | 1.00   | 1.00                   |                    | 1.00                           | 1.00                                     |              | 1.00  |
| Parking Bus, Adj  | 1.00                                  | 1.00         | 1,00                     | 1.00         | 1.00        | 1,00   | 1.00                   | 1.00               | 1.00                           | 1.00                                     | 1.00         | 1.00  |
| Adj Sat Flow, veh/h/ln                                      | 1863                                  | 1788         | 1900                     | 1863         | 1863        | 1900   | 1900                   | 1900               | 1938                           | 1891                                     | 1891         | 1928  |
| Adj Flow Rate, veh/h  | 73                                    | 242          | 212                      | 48           | 375         | 98   | 282                    | 651                | 121                            | 154                                      | 476          | 107   |
| Adj No. of Lanes  | 1                                     |              | 0                        | 1            | 1           | 0  | 1                      | 1                  | 0                              | 1  | 1            | 0   |
| Peak Hour Factor  | 0.94                                  | 0.94         | 0.94                     | 0.94         | 0.94        | 0.94   | 0.94                   | 0.94               | 0.94                           | 0.94                                     | 0,94         | 0.94  |
| Percent Heavy Veh, %  | 2                                     | 2            | 2                        | 2            | 2           | 2  | 2                      | 2                  | 2                              | 2  | 2            | 2   |
| Cap, veh/h<br>Arrive On Green                               | 144                                   | 284          | 249                      | 131          | 459         | 120  | 370                    | 761                | 141                            | 199                                      | 657          | 148   |
|   | 0.32<br>917                           | 0.32<br>881  | 0.32<br>771              | 0.32<br>933  | 0.32        | 0.32<br>372  | 0.09                   | 0.49               | 0.49                           | 0.04                                     | 0.44         | 0.44  |
| Sat Flow, veh/h   | 73                                    |              | 454                      | 933<br>48    | 1425        | 473  | 1810                   | 1559               | 290                            | 1801                                     | 1495         | 336   |
| Grp Volume(v), veh/h Grp Sat Flow(s),veh/h/in               | 7 S<br>917                            | 0            | 454<br>1652              | 46<br>933    | 0           | 473<br>  1797  | 282<br>1810            | 0                  | 772<br>1849                    | 154<br>1801                              | 0            | 583   |
| Q Serve(g_s), s   | 8.2                                   | 0.0          | 26.3                     | 933<br>5.2   | 0.0         | 24.8   | 3.5                    | 0.0                | 1049<br>37.6                   | 1.6                                      | 0.0          | 1831<br>26.8                                |
| Cycle Q Clear(g_c), s                                       | 33.0                                  | 0.0          | 26.3                     | 31.5         | 0.0         | 24.8   | 3.5                    | 0.0                | 37.6                           | 1.6                                      | 0.0          | 26.8  |
| Prop In Lane  | 1.00                                  | illing.v     | 0.47                     | 1.00         | U.V.        | 0.21   | 1.00                   | ( O.O.)            | 0.16                           | 1.00                                     | 0.0.         | 0.18  |
| Lane Grp Cap(c), veh/h                                      | 144                                   | 0            | 532                      | 131          | 0           | 579  | 370                    | 0                  | 902                            | 199                                      | 0            | 804   |
| V/C Ratio(X)  | 0.51                                  | 0.00         | 0.85                     | 0.37         | 0.00        | 0.82   | 0.76                   | 0.00               | 0.86                           | 0.77                                     | 0.00         | 0.72  |
| Ayail Cap(c_a), veh/h                                       | 144                                   | 0            | 532                      | 131          | 0           | 579  | 504                    | o de la composição | 902                            | 332                                      | 0.00         | 804   |
| HCM Platoon Ratio   | 1.00                                  | 1.00         | 1.00                     | 1.00         | 1.00        | 1.00   | 1.00                   | 1.00               | 1.00                           | 1.00                                     | 1.00         | 1.00  |
| Upstream Filter(I)  | 1.00                                  | 0.00         | 1.00                     | 1.00         | 0.00        | 1.00   | 1.00                   | 0.00               | 1.00                           | 1.00                                     | 0.00         | 1.00  |
| Uniform Delay (d), s/veh                                    | 47.1                                  | 0.0          | 32.5                     | 47.2         | 0.0         | 31.9   | 38.7                   | 0.0                | 23.0                           | 45.8                                     | 0.0          | 23.6  |
| Incr Delay (d2), s/veh                                      | 2,9                                   | 0.0          | 12.7                     | 1.7          | - 40.0      | 8.9  | 4.6                    | 0.0                | 10.2                           | 6.2                                      | 0.0          | 5.6   |
| Initial Q Delay(d3),s/veh                                   | 0.0                                   | 0.0          | 0.0                      | 0.0          | 0.0         | 0.0  | 0.0                    | 0.0                | 0.0                            | 0.0                                      | 0.0          | 0.0   |
| %ile BackOfQ(50%), veh/ln                                   | 2.2                                   | 0.0          | 13.9                     | 1.4          | 0,0         | 13.7   | 8,0                    | 0.0                | 21.6                           | 4.6                                      | 0.0          | 14.7  |
| LnGrp Delay(d),s/veh  | 50.0                                  | 0.0          | 45.1                     | 48.9         | 0.0         | 40.9   | 43.3                   | 0.0                | 33.3                           | 52.0                                     | 0.0          | 29.3  |
| LnGrp LOS   | Piel D                                |              | i D                      | D            |             | D  | D I                    |                    | C                              | D  |              | C   |
| Approach Vol, veh/h   | 125 . 2 17 12 52 52 54 2 50 4 . 3 6 8 | 527          | rement un bred rébré rei |              | 521         |  | 1011200721077126267211 | 1054               |                                | .,                                       | 737          |   |
| Approach Delay, s/veh                                       |                                       | 45,8         |                          |              | 41.6        |  |                        | 35.9               |                                |  | 34.0         |   |
| Approach LOS  |                                       | D            |                          |              | D           |  |                        | D                  |                                |  | С            |   |
| Timer   | 1                                     | 2            | 3                        | 4.           | - 5         | 6  | 7                      | 8                  |                                |  |              |   |
| Assigned Phs  | 1                                     | 2            |                          | 4            | 5           | 6  |                        | 8                  |                                |  |              |   |
| Phs Duration (G+Y+Rc), s                                    | 9,4                                   | 55.0         |                          | 38.0         | 14.4        | 50.0   |                        | 38.0               | LOUDED LIKE THE                |  |              | *18:11:11:11:12:11:11:11:11:11:11:11:11:11: |
| Change Period (Y+Rc), s                                     | 5.0                                   | 5.0          | 131202041313531343355    | 5.0          | 5.0         | **************************************   | NUCCOCOMICE.           | 5.0                | 1014 (018) (018) 133           |  | :5556ansaaqq |   |
| Max Green Setting (Gmax), s                                 | 12.0                                  |              |                          | 33.0         | 17.0        | 45.0   |                        |                    |                                |  |              |   |
| Max Q Clear Time (g_c+l1), s                                | 3.6                                   | 39.6         |                          | 35.0         | 5.5         | 28.8   | wereementii            | 33.5               | kteres verikel je ijik i i i i | : 10160011100000000000000000000000000000 |              | 10160351170506                              |
| Green Ext Time (p_c), s                                     | 0.9                                   | 3,8          |                          | 0.0          | 1.0         | 3.3  |                        | 0.0                |                                |  |              |   |
|   |                                       |              |                          |              |             |  |                        |                    |                                |  | oomentuumii- | esemples (cdid)                             |
|   |                                       |              | 20.2                     |              |             |  |                        |                    | sko (cisi s osone)             |  |              |   |
| TOM 2010 GIT Delay  |                                       |              | 38.3<br>D                |              |             |  |                        |                    |                                |  |              |   |
| Max Green Setting (Gmax), s<br>Max Q Clear Time (g_c+l1), s | 3.6                                   | 50.0<br>39.6 | 38.3                     | 33.0<br>35.0 | 17.0<br>5.5 | 45.0<br>28.8   |                        | 33.0<br>33.5       |                                |  |              |   |

| Intersection                          | 0.4                                     |   | 1 1 1 1 1 1 1 1 1 1 1 1 1                          |  |
|---------------------------------------|---|---|--|--|
| Int Delay, s/veh                      | 0.1                                     |   |  |  |
|                                       | -ni                                     |   | ariana na kata ana ana ana ana ana ana ana ana ana | SBT SBR  |
| Movement<br>Vol. veh/h                | EBL                                     | EBR<br>1915 1915                            | NBL NBT  | SBT SBR 25.5   |
| Conflicting Peds, #/hr                | 0                                       | 0   | 0 0  | CONTRACTOR OF COME OF THE CONTRACT OF CONTRACT CONTRACTOR CONTRACT |
| Sign Control                          | Stop                                    | Stop  | Free Free  | Free Free  |
| RT Channelized                        | -                                       | None  | - None   | - None   |
| Storage Length                        | 0                                       |   |  |  |
| Veh in Median Storage, # Grade, %     | 0<br>-2                                 | -<br>A-100000000000000000000000000000000000 | - 0<br>- 2   | 0 -  |
| Peak Hour Factor                      | 90                                      | 90  | 90 90  | туронын асындында на Карсына темен жана алдында шашын айында байда.<br>90 90   |
| Heavy Vehicles, %                     | 2                                       | 2   | 2 2  | $ar{\mathbf{z}}$   |
| Mvmt Flow                             | 0                                       | 10  | 2 1101   | 766 2  |
|                                       |   |   |  | Million de Carlos de<br>Carlos de Carlos de  |
| Major/Minor                           | Minor2                                  |   | Major1   | Major2   |
| Conflicting Flow All                  | 1873                                    | 768   | 769 - 0  |  |
| Stage 1<br>Stage 2                    | 768<br>1105                             |   |  |  |
| Critical Hdwy                         | 6.02                                    | 6.02  | 4.12 -   | isingsunuun ee eminemaan ee erimaan kaasaan lala lala lala lala lala lala lal  |
| Critical Howy Stg 1                   | 5.02                                    |   |  |  |
| Critical Hdwy Stg 2                   | 5.02                                    | <u>.</u>                                    |  |  |
| Follow-up Hdwy                        | 3.518                                   | 3.318                                       | 2.218  |  |
| Pot Cap-1 Maneuver<br>Stage 1         | 97<br>499                               | 419   | 845  | Barring no a regele de la company de la la la la la company de la company de la company de la company de la com  |
| Stage 2                               | 358                                     | enko <b>enii.</b>                           | (100.9959666616161616161616161616161616161616      | angunga mengungga palakan pala<br>   |
| Platoon blocked, %                    | iar es cresses                          |   |  |  |
| Mov Cap-1 Maneuver                    | 96                                      | 419   | 845 -  |  |
| Mov Cap-2 Maneuver                    | 96                                      |   |  |  |
| Stage 1 Stage 2                       | 499<br>356                              |   |  |  |
| olaye Z                               | 330                                     |   |  | aan muunin ka  |
| Approach                              | EB:                                     |   | NB   | The second state of the SB and the second second state of the second second second second second second second   |
| HCM Control Delay, s                  | 13.8                                    |   | 0  | 0  |
| HCM LOS                               | B. B                                    |   |  |  |
|                                       | 273322222323232332332333333333333333333 |   |  | TERESERVANDE PERSONALA PER   |
| Minor Lane/Major Mymt                 | NBL N                                   | BTEBLn1 S                                   | BT SBR   |  |
| Capacity (veh/h)                      | 845                                     | - 419                                       |  |  |
| HCM Lane V/C Ratio                    | 0.003                                   | - 0.024                                     |  |  |
| HCM Control Delay (s)                 | 9.3                                     | 0 13.8                                      |  | annen innassuuganen asujulohjasuja jajaja parisinaaannan ona aanneissuuri kullanina  |
| HCM Lane LOS<br>HCM 95th %tile Q(veh) | A                                       | A B   |  |  |
| HOW SOM MARK Q(VEH)                   | 0                                       | - 0.1                                       |  |  |

|                                      | •          | <b>-</b>     | <b>—</b>     | <u> </u>          | <del>-</del>                          | 1                                      | 4            | †                    | <i>/</i> *                              | <b>\</b>                                    | <del> </del>     | 1                                      |
|--------------------------------------|------------|--------------|--------------|-------------------|---------------------------------------|--|--------------|----------------------|---|---|------------------|--|
| Movement                             | EBL        | EBT          | EBR          | WBL               | WBT                                   | WBR                                    | NBL          | NBT                  | NBR                                     | SBL   | SBT              | SBR                                    |
| Lane Configurations                  | *          | 4            |              | <b>`</b>          | ĵ.                                    |  | ning regress | <b>)</b>             | 50664 7'A786                            | <b>ή</b>                                    | <b>þ</b>         | ************************************** |
| Volume (veh/h)                       | 70         | 237          | 209          | 48                | 363                                   | 93                                     | 271          | 685                  | 116<br>12                               | 149   | 509<br>6         | 107<br>16                              |
| Number                               | <b>7</b>   | 4            | 14           | 3                 | 8<br>  0                              | 18<br>0                                | 5<br>0       | 2<br>0               | 0                                       | 0   | 0                | 0                                      |
| Initial Q (Qb), veh                  | 0          | 0            | 0            | 0                 | U                                     | 1.00                                   | 1.00         | U                    | 1.00                                    | 1.00  |                  | 1.00                                   |
| Ped-Bike Adj(A_pbT)                  | 1.00       | * 00         | 1.00<br>1.00 | 1.00<br>1.00      | 1.00                                  | 1.00                                   | 1.00         | 1.00                 | 1.00                                    | 1.00  | 1.00             | 1.00                                   |
| Parking Bus, Adj                     | 1,00       | 1.00         | 1900         | 1863              | 1863                                  | 1900                                   | 1900         | 1900                 | 1938                                    | 1891  | 1891             | 1928                                   |
| Adj Sat Flow, veh/h/ln               | 1863       | 1788<br>252  | 222          | 51                | 386                                   | 99                                     | 288          | 729                  | 123                                     | 159   | 541              | 114                                    |
| Adj Flow Rate, veh/h                 | 74<br>1    | 274<br>1     | 0            | 1                 | 900<br>1                              | 0                                      | 1            | 1                    | 0                                       | 1   | 1                | 0                                      |
| Adj No. of Lanes<br>Peak Hour Factor | 0.94       | 0.94         | 0.94         | 0,94              | 0.94                                  | 0.94                                   | 0.94         | 0.94                 | 0.94                                    | 0.94  | 0.94             | 0.94                                   |
| Percent Heavy Veh, %                 | 2          | 2            | 2            | 2                 | 2                                     | 2                                      | 2            | 2                    | 2                                       | 2   | 2                | 2                                      |
| Cap, veh/h                           | 121        | 274          | 242          | 101               | 447                                   | 115                                    | 355          | 750                  | 127                                     | 199   | 645              | 136                                    |
| Arrive On Green                      | 0.31       | 0.31         | 0.31         | 0.31              | 0.31                                  | 0.31                                   | 0.12         | 0.47                 | 0.47                                    | 0.07  | 0.43             | 0.43                                   |
| Sat Flow, veh/h                      | 907        | 878          | 774          | 916               | 1431                                  | 367                                    | 1810         | 1585                 | 267                                     | 1801  | 1515             | 319                                    |
| Grp Volume(v), veh/h                 | 74         | 0            | 474          | 51                | 0                                     | 485                                    | 288          | 0                    | 852                                     | 159   | 0                | 655                                    |
| Grp Sat Flow(s), veh/h/lin           | 907        | Ō            | 1652         | 916               | 0                                     | 1798                                   | 1810         | 0                    | 1853                                    | 1801  | 0                | 1834                                   |
| Q Serve(g_s), s                      | 6.2        | 0.0          | 29.3         | 3.7               | 0.0                                   | 26.8                                   | 8.0          | 0.0                  | 47.4                                    | 5.1   | 0.0              | 33.7                                   |
| Cycle Q Clear(g_c), s                | 33.0       | 0.0          | 29.3         | 33.0              | 0.0                                   | 26.8                                   | 8.0          | 0.0                  | 47.4                                    | 5.1   | 0.0              | 33.7                                   |
| Prop In Lane                         | 1.00       |              | 0.47         | 1.00              | · · · · · · · · · · · · · · · · · · · | 0.20                                   | 1.00         | processor in Lighted | 0.14                                    | 1.00  |                  | 0.17                                   |
| Lane Grp Cap(c), veh/h               | 121        | 0            | 516          | 101               | 0                                     | 561                                    | 355          | 0                    | 877                                     | 199   | 0 00             | 781                                    |
| V/C Ratio(X)                         | 0.61       | 0.00         | 0.92         | 0.51              | 0.00                                  | 0.86                                   | 0.81         | 0.00                 | 0.97                                    | 0.80<br>273                                 | 0.00             | 0.84<br>781                            |
| Avail Cap(c_a), veh/h                | 121        | 0            | 516          | 101               | 0                                     | 561                                    | 429          | 4.00                 | 877                                     | 1.00  | 1.00             | 1.00                                   |
| HCM Platoon Ratio                    | 1.00       | 1.00         | 1.00         | 1.00              | 1.00                                  | 1.00                                   | 1.00         | 1.00<br>0.00         | 1.00<br>1.00                            | 1.00  | 0.00             | 1.00                                   |
| Upstream Filter(I)                   | 1.00       | 0.00         | 1.00         | 1.00              | 0.00                                  | 1.00<br>34.2                           | 1.00<br>41.4 | 0.0                  | 27.2                                    | 46.7  | 0.0              | 27.1                                   |
| Uniform Delay (d), s/veh             | 50.6       | 0.0          | 35.1         | 51.6              | 0.0<br>0.0                            | 34.2<br>13.2                           | 9,5          | 0.0                  | 24.3                                    | 11.1  | 0.0              | 10.5                                   |
| Incr Delay (d2), s/veh               | 8.7        | 0.0          | 21.7<br>0.0  | 4.1<br>0.0        | 0.0                                   | 13.2<br>0.0                            | 0.0          | 0.0                  | 0.0                                     | 0.0   | 0.0              | 0.0                                    |
| Initial Q Delay(d3),s/veh            | 0.0<br>2.4 | 0.0<br>0.0   | 0.0<br>16.4  | 0.0<br>1,6        | 0.0                                   | 15.4                                   | 8.9          | 0.0                  | 30.1                                    | 5.2   | 0.0              | 19.2                                   |
| %ile BackOfQ(50%),veh/ln             | 59.4       | 0.0          | 56.7         | 55.7              | 0.0                                   | 47.4                                   | 51.0         | 0.0                  | 51.5                                    | 57.8  | 0.0              | 37.6                                   |
| LnGrp Delay(d),s/veh                 | ээ.4<br>Е  | U.U          | 30.1<br>E    | 11 E              |                                       | Ď                                      | D            |                      | D.                                      | ##E   |                  | D                                      |
| LnGrp LOS                            |            | 548          |              | agn mar Hiji      | 536                                   | 0 - 00 - 00 - 00 - 00 - 00 - 00 - 00 - |              | 1140                 |   |   | 814              |  |
| Approach Vol, veh/h                  |            | 57.1         |              |                   | 48.2                                  |  |              | 51.3                 |   |   | 41.5             |  |
| Approach Delay, s/veh Approach LOS   |            | E            |              |                   | D                                     |  |              | D                    | 1114-14144-4-45111111111111111111111111 | (559998120000000000000000000000000000000000 | D                |  |
| • •                                  |            | _            |              |                   | -                                     |  | 7            | 8                    |   |   |                  |  |
| Timer                                | 1.         | 2            | .3           | 4                 | 5                                     | 6                                      |              | 8                    |   |   |                  |  |
| Assigned Phs                         | 1          | 2            |              | 4                 | 5                                     | 6                                      |              | 38.0                 |   |   |                  |  |
| Phs Duration (G+Y+Rc), s             | 12.7       | 55.0         |              | 38.0              | 17.7                                  | 50.0<br>5.0                            |              | 5.0                  |   |   | 1048233116181408 | inidiae and                            |
| Change Period (Y+Rc), s              | 5.0        | 5.0          |              | 5.0<br>33.0       | 5.0<br>17.0                           | 5.0<br>45.0                            |              | 33.0                 |   |   |                  |  |
| Max Green Setting (Gmax), s          |            | 50.0<br>49.4 |              | 35.0<br>35.0      | 10.0                                  | 35.7                                   |              | 35.0                 | eren karanaria                          | esanavēši                                   | elionalionoù     | and Bullion                            |
| Max Q Clear Time (g_c+l1), s         | 7.1<br>0.6 | 49.4<br>0.4  |              | 0.0               | 0.8                                   | 2.9                                    |              | 0.0                  |   |   |                  |  |
| Green Ext Time (p_c), s              | 0.0        | U.4          |              | U.V.              | ν.Υ.                                  |  |              | 7.67                 |   |   | ,                |  |
| Intersection Summary                 |            |              |              | and the second of | ann an Gasacia                        | INNERSON DECEMBER                      | Demandeurau. |                      | gentingskeptistist                      | and the second                              |                  | a a sa                                 |
| HCM 2010 Ctrl Delay                  |            |              | 49.2         |                   |                                       |  |              |                      |   |   |                  |  |
| HCM 2010 LOS                         |            |              | D            |                   |                                       |  |              |                      |   |   |                  |  |

|                                       |   |           | · ·  |   |  |
|---------------------------------------|---|-----------|--|---|--|
| Intersection                          |   |           |  | Addition of the second of the | 7. (D. 1)  |
| Int Delay, s/veh                      | 0.1                                     |           |  |   | ]  |
|                                       |   |           |  |   |  |
| Movement                              | EBL                                     | EBR       | NBL NBT  | SBT SBR   |  |
| Vol. veh/h                            | 0                                       | 9         | 2 1073   | 764 2   |  |
| Conflicting Peds, #/hr                | 0                                       | 0         | 0 0  | 0 0   | > ~ , 200 ~ · · · · · · · · o f = 5 ~ o d = 200 o · v = 0 · v d > 20 c v v v · · · d v · · v zod v o 60 w o o z ž v v ·  |
| Sign Control                          | Stop                                    | Stop      | Free Free  | Free Free   |  |
| RT Channelized                        | 0                                       | None      | - None   | - None  |  |
| Storage Length Veh in Median Storage, | **, *** ** ** ** ** * * * * * * * * * * |           | Nielia (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11) (1.11)  |   |  |
| Grade, %                              | # 0<br>-214                             |           |  | 2   |  |
| Peak Hour Factor                      | 90                                      | 90        | 90 90  | 90 90   | NAMES OF THE SAME  |
| Heavy Vehicles, %                     | 2                                       | 2         | 2 2  | 2 2   |  |
| Mvmt Flow                             | 0                                       | 10        | 2 1192   | 849 2   | r og a standarfikken flatt skrætt blev fir helde skrætt formalt formal |
|                                       |   |           |  |   |  |
| Major/Minor                           | Minor2                                  |           | Major1   | Major2  |  |
| Conflicting Flow All                  | 2047                                    | 850       | 851 0  | 0.00  | era journarian iteituria paineminin<br>Sunna teruta ar niista ja ja karasa   |
| Stage 1                               | 850                                     | -         |  |   | kantata ni ti Belli si kecila alabaha darkhiran kecambaa casali  |
| Stage 2 111 1                         | 1197                                    |           |  |   |  |
| Critical Hdwy<br>Critical Hdwy Stg 1  | 6.02<br>5.02                            | 6.02      | 4.12 -   |   |  |
| Critical Hdwy Stg 2                   | 5.02                                    | 318       | Billionionia de la compaña de la compaña<br>   | i oroandin ningen sam samuenda kenta kenta<br>  | HIG 1070 HE 1999 GERNARIA GIA KATA ZEO PERE  |
| Follow-up Hdwy                        | 3.518                                   | 3:318     | 2.218  |   |  |
| Pot Cap-1 Maneuver                    | 77                                      | 378       | 788 -  | = -   |  |
| Stage 1                               | 460                                     |           | and in the same of |   |  |
| Stage 2                               | 327                                     | -<br>     |  | -<br>E Saromoro oranga skunga abah denga denga  |  |
| Platoon blocked, % Mov Cap-1 Maneuver | 76                                      | 378       | 788 -  |   |  |
| Mov Cap-1 Maneuver                    | 76                                      | 370       | 700 -  |   |  |
| Stage 1                               | 460                                     | -         |  | iarakan na kitakanan kanan kanan<br>-   |  |
| Stage 2                               | 324                                     |           | ng ng ng lightin ng <b>si</b> n i  |   | ij pir ta jinda ij piga ya Qidir.  |
|                                       |   |           |  |   |  |
| Approach                              | EB                                      |           | NB .   | SB  |  |
| HCM Control Delay, s                  | 14.8                                    |           | 0  | 0 .   |  |
| HCM LOS                               | a je i Beis                             |           |  | Hidro laineathaileach   |  |
|                                       |   |           |  |   |  |
| Minor Lane/Major Mymt                 | NBL N                                   | BTEBLn1 S | BT SBR   |   |  |
| Capacity (veh/h)                      | 788                                     | - 378     |  |   |  |
| HCM Lane V/C Ratio                    | 0.003                                   | - 0.026   | (fostaradori   |   |  |
| HCM Control Delay (s)                 | 9.6                                     | 0 14.8    |  | elinilitettituunnnnnninnnnnnnuutuutuutuutuutuutuutuutuutuutuut  | :::::::::::::::::::::::::::::::::::::::  |
| HCM Lane LOS                          | A                                       | A B       | P 1 5 5 5  |   |  |
| HCM 95th %tile Q(veh)                 | 0                                       | - 0.1     | • -  |   |  |

| 1: Route | 300 | & | Route | 52 |
|----------|-----|---|-------|----|
|          |     |   |       |    |

| Lane Configurations  Y Volume (vehn)  79 243 209 50 368 93 271 686 116 149 511 115 Initial Q(2b), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |  | •   |  | •                                  | •                                    | <b>←</b>                               | 1   | •                                       | †                                       | <i>&gt;</i>   | 7                                       | <del> </del>                                 | 4                                       |
|---|--|---|--|------------------------------------|--------------------------------------|--|---|---|---|---|---|--|---|
| Volume (verlyh)   | Movement   | EBL   | EBT  | EBR                                | WBL                                  | WBT                                    | WBR   | NBL                                     | NBT                                     | NBR   | SBL                                     | SBT  | SBR                                     |
| Number 7 4 14 3 8 8 18 5 2 12 1 1 6 15 initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | Lane Configurations  |   |  |                                    |                                      |  |   |   |   | 19×9×4 - 1×1941 1841 - 842 19                             | <b>*</b>                                |  |   |
| Initial C (Ob), veh   | ハイラヤル 4 トルマルアハヤ トロルイルタル カラ・デア カアカラ このちアイル かいかい かいかにもの から こちょう かんじょう シュニュ シュンジュ | > 5 7 K > K > w w w + w + 4 + 4 + 5 × x + v + 4 + 4 + 5 × x | *****************  | ******************                 | 43 43 83 4 Me 48 48 \n \8, 97 83     | ###*################################## | 23 OS CLEAS ESS LARY LYAY 19.                 | 2525958555556664472464666               | 40.48.02.02.45.007.48.02.89.45.46       | 80.68.66 -6 -6 -6 -1 -1 -0 -0 -1 -10                      | 149                                     | ************                                 | *************                           |
| Ped-Bike Adj(A_pbT)   |  |   |  |                                    |                                      |  |   |   |   |   | 1                                       | _  |   |
| Parking Bus, Agj  |  |   | 0  |                                    |                                      | 0                                      | ***********************                       | *57323357254224472244                   | 0                                       |   | ***********                             | 0  | (20000000000000000000000000000000000000 |
| Adj Saf Flow, velvh/h/h Adj No. of Lanes 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0  |  |   |  |                                    |                                      | 10014-1444-144                         |   |   |   |   |   |  |   |
| Adj Flow Rate, veh/h Adj No of Lanes 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 0  |  | 4:46556861648561854.]89858]8                                | >5\$\$565\$> ~46> 02> 15\$5594                               | 6; e3 h2;; 2646 ; t . e4 ( f m l . | .   P.   P.   P.   P.   P.   P.   P. | SEEDER BOOKS CONTRACTORS               | \$4) chur everunsermisester                   |   | A.A                                     | \$1.71.21.22.11.20.11.11.11.11.11.11.11.11.11.11.11.11.11 | ?? *****************                    | UF 83 63 87 87 00 1974 9988                  | **********                              |
| Adj No. of Lanes  |  |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| Peak Hour Factor  |  | 25.00m; c5.054747431313 <b>13</b> 83.715                    | 19658-6881718-6-5-1966-694                                   | 3737285718773 17378775             | 1                                    | naminini asimbes                       | \$11463414141419-1-11444                      |   |   |   |   | .e.c.c.co.ox20.co.d2636365                   | : >>>                                   |
| Percent Heavy Veh, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |  |   |  |                                    | אם ח                                 |  |   |   | •                                       |   | •                                       | •  |   |
| Cap, veh/h OR Caen OR |  |   | *******************  |                                    |                                      |  | 21 1121 20 22 27 27 37 37 11 61               | ft.745 00 65 88 f0 c0 c 3 tu- 7         | married training (manifolds 45)         | 856, 1011, 111, 111, 110, 110, 110, 110, 1                |   |  | 3 007 628 638 623 6 170                 |
| Arrive On Green   |  |   |  |                                    |                                      |  |   | 347                                     |   |   |   |  |   |
| Saf Flow, veh/h   903   890   763   910   1435   363   1810   1586   267   1801   1496   335  |  |   |  | 0,410.,7                           |                                      | 0,000,000                              |   | \$8541498951411 1545149                 |   |   |   |  | 4747A4A7A7A4A7.07                       |
| Grp Volume(v), veh/h  84  0  481  53  0  490  288  0  853  159  0  666  Grp Sat Flow(s), veh/h/in  903  0  1654  910  0  1799  1810  0  1853  1801  0  1831  0  28eve(g.s), s  5.8  0.0  29.8  3.2  0.0  27.2  8.6  0.0  47.5  5.1  0.0  34.7  Cycle Q Clear(g.c), s  33.0  0.0  29.8  33.0  0.0  27.2  8.6  0.0  47.5  5.1  0.0  34.7  Prop In Lane  1.00  0.46  1.00  0.20  1.00  0.14  1.00  0.18  1.00  0.18  1.00  0.18  1.00  0.18  1.00  0.19  1.00  0.10  1.00  0.10  1.00  0.10  1.00  0.85  Avail Cap(c.a), veh/h  1118  0  516  96  0  562  347  0  877  199  0  780  V/C Ratio(X)  0  0.71  0.00  0.93  0.55  0.00  0.87  0.83  0.00  0.97  0.80  0.09  0.80  0.00  0.85  Avail Cap(c.a), veh/h  118  0  516  96  0  562  347  0  877  199  0  780  V/C Ratio(X)  0  0.71  0.00  0.93  0.55  0.00  0.85  Avail Cap(c.a), veh/h  118  0  516  96  0  562  347  0  877  199  0  780  V/C Ratio(X)  0  0.71  0.00  0.93  0.55  0.00  0.87  0.83  0.00  0.97  0.80  0.00  0.80  0.00  0.85  Avail Cap(c.a), veh/h  118  0  516  96  0  562  347  0  877  199  0  780  0  0  0.80  0.00  0.80  0.00  0.80  0.00  0.80  0.00  0.00  0.100  1.00  0.00  1.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  0.00  1.00  1.00  0.00  1.00  0.00  1.00  0.00  1.00  0.00 |  |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| Grp Sat Flow(s), veh/h/ln 903 0 1654 910 0 1799 1810 0 1853 1801 0 1831 Q Serve(g, s), s 5.8 0.0 29.8 3.2 0.0 27.2 8.6 0.0 47.5 5.1 0.0 34.7 Cycle Q Clear(g, c), s 33.0 0.0 29.8 33.0 0.0 27.2 8.6 0.0 47.5 5.1 0.0 34.7 Prop In Lane 1.00 0.46 1.00 0.20 1.00 0.14 1.00 0.18 Lane Grp Cap(c), veh/h 118 0 516 96 0 562 347 0 877 199 0 780 V/C Ratio(X) 0.71 0.00 0.93 0.55 0.00 0.87 0.83 0.00 0.97 0.80 0.00 0.85 Avail Cap(c_a), veh/h 118 0 516 96 0 562 421 0 877 273 0 780 Avail Cap(c_a), veh/h 118 0 516 96 0 562 421 0 877 273 0 780 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0  |  |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| Q Serve(g s), s   |  |   | Albania Arabana arabanta                                     |                                    |                                      |  |   |   |   |   |   |  |   |
| Cycle Q Glear(g_c), s   |  |   | DESTRUCTION OF THE PROPERTY OF THE                           |                                    |                                      | La. Mr. helyes                         | 211 (211)                                     | 202014 2233 223 1202 245 24             | 0.0                                     | 22.234.44.22.22.22.22.22.22.22.22.22.22.22.22             | 33 (435)4 (425)4 (425)                  | 0.0  | 34.7                                    |
| Lane Grp Cap(c), veh/h  118  0 516  96  0 562  347  0 877  199  0 780  V/C Ratio(X)  0.71  0.00  0.93  0.55  0.00  0.87  0.83  0.00  0.97  0.80  0.00  0.85  Avail Cap(c_a), veh/h  118  0 516  96  0 562  421  0 877  273  0 780  HCM Platcon Ratio  1.00  | Cycle Q Clear(g_c), s  |   |  |                                    |                                      |  |   |   |   |   | 5.1                                     |  | 34.7                                    |
| V/C Ratio(X)       0.71       0.00       0.93       0.55       0.00       0.87       0.83       0.00       0.97       0.80       0.00       0.85         Avail Cap(c_a), veh/h       118       0       516       96       0       562       421       0       877       273       0       780         HCM Platoon Ratio       1.00  | Prop In Lane   | 1.00  | HITH IAH O IZI O OMO OM                                      | 0.46                               | 1.00                                 | the objection confidential             | 0.20  | 1.00                                    |   | 0.14  | 1.00                                    | 19 144444881 181949 * 9* *                   | 0.18                                    |
| Avail Cap(c_a), veh/h   | Lane Grp Cap(c), veh/h   | 118   | 0  | 516                                | 96                                   | 0                                      | 562   | 347                                     | 0                                       | 877   | 199                                     | 0  | 780                                     |
| HCM Platoon Ratio   | V/C Ratio(X)   |   | 0.00   |                                    |                                      |  |   |   | 0.00                                    |   |   |  | 0.85                                    |
| Upstream Filter(I)       1:00       0:00       1:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       1:00       0:00       27.2       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       27.4       46.7       0.0       0   | Avail Cap(c_a); veh/h  | ACCULATION OF THE CONCESS.                                  | \$ to 1 : \$1 ki to ro es s\$tm: Kes                         | *******************                | er transferences in                  | ************************************** | Alacata Charta Caves                          |   |   |   | TORSECT LANGE INTERNESS.                | APTO DE COMPANY DE LA PERE                   | 780                                     |
| Uniform Delay (d), s/veh 51.1 0.0 35.2 52.0 0.0 34.3 41.9 0.0 27.2 46.7 0.0 27.4 lncr Delay (d2), s/veh 18.5 0.0 23.9 6.8 0.0 14.1 11.2 0.0 24.5 11.1 0.0 11.5 lnitial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.   |  |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| Incr Delay (d2), s/veh  |  |   |  |                                    | SPECIAL CHEMINAL IN CASE             | CALL INC. ALVER- PARENT                |   | 12350 000 123 153 15 15 120             | 100000000000000000000000000000000000000 |   | St. afternal r. Sabiret                 | 14242A4 2442 2442 (h.)                       | 64 469 - 5470 - 7 - 1 604               |
| Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.  |  |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| %ile BackOfQ(50%),veh/ln 3.0 0.0 17.1 1.7 0.0 15.7 9.2 0.0 30.1 5.2 0.0 19.9 LnGrp Delay(d),s/veh 69.6 0.0 59.1 58.9 0.0 48.4 53.1 0.0 51.7 57.8 0.0 38.9 LnGrp LOS   |  | 1. January 201 - 11. 10/00 10: 10:10:                       | \$1.51-14.54.12.14.5.14.14.14.14.14.14.14.14.14.14.14.14.14. |                                    | (*) <> 1,40° 0,00° 10 10 10 40 1     | 2 00 02 (1/2 2 12) 12 02421,024        | 415454T. ASSESSED ALE: 834                    | 200000000000000000000000000000000000000 | 23: ( . 53: )                           | at ital inica, indication                                 |   | # 1 # 10 C C C C C C C C C C C C C C C C C C | essagifie die gramme van der            |
| LnGrp Delay(d), s/veh       69.6       0.0       59.1       58.9       0.0       48.4       53.1       0.0       51.7       57.8       0.0       38.9         LnGrp LOS       E       E       E       D       D       D       D       E       D       D         Approach Vol, veh/h       565       543       1141       825         Approach Delay, s/veh       60.7       49.4       52.0       42.5       42.5         Approach LOS       E       D       D       D       D       D       D         Timer       1       2       3       4       5       6       7       8         Assigned Phs       1       2       4       5       6       8         Phs Duration (G+Y+Rc), s       12.7       55.0       38.0       17.7       50.0       38.0         Change Period (Y+Rc), s       5.0       5.0       5.0       5.0       5.0       5.0         Max Q Clear Time (g_c+H), s       7.1       49.5       35.0       10.6       36.7       35.0         Green Ext Time (p_c), s       0.6       0.3       0.0       0.8       2.7   |  |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| LnGrp LOS         E         E         E         D         D         D         E         D           Approach Vol, veh/h         565         543         1141         825           Approach Delay, s/veh         60.7         49.4         52.0         42.5           Approach LOS         E         D         D         D           Timer         1         2         3         4         5         6         7         8           Assigned Phs         1         2         4         5         6         8           Phs Duration (G+Y+Rc), s         12.7         55.0         38.0         17.7         50.0         38.0           Change Period (Y+Rc), s         5.0         5.0         5.0         5.0         5.0         5.0           Max Green Setting (Gmax), s         12.0         50.0         33.0         17.0         45.0         33.0           Max Q Clear Time (g_c+I), s         7.1         49.5         35.0         10.6         36.7         35.0           Green Ext Time (p_c), s         0.6         0.3         0.0         0.8         2.7         0.0           Intersection Summary         HCM 2010 Ctrl Delay         50.6         0.0  |  | F> C27 [324] [345] [345] [445] [447] [341] [47]             | 44522854281228,4248398                                       |                                    |                                      |  | \$\$\$\$\$\$\$\\\$\$\$\$\$\$\$\$\$\$\$\$\$\$? | 227270622222222222222222                |   | 2.3850 set 45 ball 484711                                 |   | > :: :>\{**:4{                               | 1 18 × Le 1 3 × 1 × 1 × 1 × 1 1         |
| Approach Vol, veh/h 565 543 1141 825 Approach Delay, s/veh 60.7 49.4 52.0 42.5 Approach LOS E D D D  Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 4 5 6 8 Phs Duration (G+Y+Rc), s 12.7 55.0 38.0 17.7 50.0 38.0 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 12.0 50.0 33.0 17.0 45.0 33.0 Max Q Clear Time (g_c+I1), s 7.1 49.5 35.0 10.6 36.7 35.0 Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0 Intersection Summary HCM-2010 Ctrl Delay 50.6  |  |   | 0.0  |                                    |                                      | U.U                                    |   |   |   |   |   | U.U  |   |
| Approach Delay, s/veh 60.7 49.4 52.0 42.5  Approach LOS E D D D  Timer 1 2 3 4 5 6 7 8  Assigned Phs 1 2 4 5 6 8  Phs Duration (G+Y+Rc), s 12.7 55.0 38.0 17.7 50.0 38.0  Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0  Max Green Setting (Gmax), s 12.0 50.0, 33.0 17.0 45.0 33.0  Max Q Clear Time (g_c+I1), s 7.1 49.5 35.0 10.6 36.7 35.0  Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0  Intersection Summary  HCM-2010 Ctrl Delay  |  |   | ECE  | E ;                                |                                      | E 4 2                                  | ייַע  | יש                                      |   | ע   | C.                                      | OGE  | עו                                      |
| Approach LOS E D D D  Timer 1 2 3 4 5 6 7 8  Assigned Phs 1 2 4 5 6 8  Phs Duration (G+Y+Rc), s 12.7 55:0 38.0 17.7 50.0 38.0  Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0  Max Green Setting (Gmax), s 12.0 50:0 33.0 17.0 45.0 33.0  Max Q Clear Time (g_c+l1), s 7.1 49.5 35.0 10.6 36.7 35.0  Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0   |  |   |  |                                    |                                      |  |   | lühirinleri (2)                         |   |   |   |  |   |
| Timer 1 2 3 4 5 6 7 8  Assigned Phs 1 2 4 5 6 8  Phs Duration (G+Y+Rc), s 12.7 55:0 38.0 17.7 50:0 38.0  Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0  Max Green Setting (Gmax), s 12.0 50:0 33.0 17.0 45:0 33.0  Max Q Clear Time (g_c+1), s 7.1 49.5 35.0 10.6 36.7 35:0  Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0  Intersection Summary  HCM-2010 Ctrl Delay 50:6  |  |   | >×{}×× {×× ××××× ×× ×× ×× ×× ××                              |                                    |                                      |  |   |   |   |   |   |  |   |
| Assigned Phs 1 2 4 5 6 8  Phs Duration (G+Y+Rc), s 12.7 55.0 38.0 17.7 50.0 38.0  Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0  Max Green Setting (Gmax), s 12.0 50.0 33.0 17.0 45.0 33.0  Max Q Clear Time (g_c+I1), s 7.1 49.5 35.0 10.6 36.7 35.0  Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0  Intersection Summary  HCM 2010 Ctrl Delay 50.6  |  | 1   | _<br>  | 3                                  | Δ                                    | - 5                                    | 6   | 7                                       | Я                                       |   |   | _  |   |
| Phs Duration (G+Y+Rc), s       12.7       55.0       38.0       17.7       50.0       38.0         Change Period (Y+Rc), s       5.0       5.0       5.0       5.0       5.0         Max Green Setting (Gmax), s       12.0       50.0       33.0       17.0       45.0       33.0         Max Q Clear Time (g_c+l1), s       7.1       49.5       35.0       10.6       36.7       35.0         Green Ext Time (p_c), s       0.6       0.3       0.0       0.8       2.7       0.0         Intersection Summary       HCM-2010 Ctrl Delay       50.6       50.6       50.6       6  | Assigned Phs   | 1   | 2  | V                                  | 4                                    |  |   | f                                       |   |   |   |  |   |
| Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 12.0 50.0 33.0 17.0 45.0 33.0 Max Q Clear Time (g_c+l1), s 7.1 49.5 35.0 10.6 36.7 35.0 Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0 Max Q Clear Summary  HCM 2010 Ctrl Delay 50.6   | Phs Duration (G+Y+Rc), s   |   |  |                                    |                                      |  | ********************                          |   |   |   |   |  |   |
| Max Green Setting (Gmax), s. 12.0       50:0       33.0       17:0       45:0       33.0         Max Q Clear Time (g_c+I1), s. 7.1       49.5       35.0       10.6       36.7       35.0         Green Ext Time (p_c), s. 0.6       0.3       0.0       0.8       2.7       0.0         Intersection Summary       4   | Change Period (Y+Rc), s  | ******************  | ***************  |                                    |                                      |  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,       | ······································  | 0.0000000000000000000000000000000000000 |   | *************************************** | 10101010101710();E                           |   |
| Green Ext Time (p_c), s 0.6 0.3 0.0 0.8 2.7 0.0 Intersection Summary  HCM 2010 Ctrl Delay 50.6  |  | s 12.0  |  |                                    |                                      |  | 45,0  |   |   |   |   |  | 10000                                   |
| Intersection Summary HCM 2010 Ctrl Delay  |  | s 7.1   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| HCM 2010 Ctrl Delay 50.6  | Green Ext Time (p_c), s  | 0.6   | 0.3  |                                    | 0.0                                  | 8.0                                    | 2.7   |   | 0.0                                     |   |   |  |   |
|   | Intersection Summary   |   |  |                                    |                                      |  |   |   |   |   |   |  |   |
| HCM 2010 LOS D  | HCM 2010 Ctrl Delay  |   | uliselli (ili  | 50.6                               |                                      |  |   |   |   |   |   |  | mallain                                 |
|   | HCM 2010 LOS   |   |  | D                                  |                                      |  |   |   |   |   |   |  |   |

| ntersection<br>nt Delay, s/veh             | 0.7          |                      |   |   |   |
|--|--------------|----------------------|---|---|---|
|  |              |                      |   |   |   |
| lovement                                   | - EBL - !    | EBR                  | NBL NBT                                   | SBT SBR   | ETRE II HANNIN III SHIN CHERSTRA        |
| ol, veh/h                                  | 9            | 27                   | 18 1065                                   | 755 14 0 0  |   |
| Conflicting Peds, #/hr<br>sign Control     | 0<br>Stop    | 0<br>■ Stop          | 0 0<br>Free Free                          | 0 0<br>Free Free  |   |
| ign Control RT Channelized                 | -<br>-       | None                 | - None                                    | - None  | .come.manne.scoms                       |
| torage Length                              | 0            |                      |   |   |   |
| eh in Median Storage,#                     | 0            |                      | - 0                                       |   | are creening an author (AVC) (AVC)      |
| Grade, %                                   | 2            | AA                   |   | 90 90   |   |
| eak Hour Factor                            | 90<br>2      | 90<br>2              | 90 90<br>2 2                              | 90 90   |   |
| leavy Vehicles, %<br>lvmt Flow             | 10           | 30                   | 20 1183                                   | ugusanain 1996 1998 1899 1899 1899 1899 1899 1899   | SUADARISTO DE SAMUALUM                  |
|  |              |                      |   |   |   |
| /ajor/Minor                                | Minor2       |                      | Major1                                    | Major2  |   |
| Conflicting Flow All                       | 2070         | 847                  | 854 0                                     |   |   |
| Stage 1                                    | 847          | -                    | листопинания «- да в и полотополиче».<br> | (g) 11 (g) (11 (g)  |   |
| Stage 2                                    | 1223         |                      |   |   |   |
| Critical Hdwy                              | 6.02         | 6.02                 | 4.12<br>                                  | <br>Nergoeder en skillere en  | Sens neronistik                         |
| Critical Howy Stg 1<br>Critical Howy Stg 2 | 5.02<br>5.02 |                      |   |   | Karan San Bandarian K                   |
| ollow-up Hdwy                              | 3.518        | 3.318                | 2.218                                     |   |   |
| ot Cap-1 Maneuver                          | 75           | 379                  | 785 -                                     |   | -                                       |
| Stage 1                                    | 462          |                      |   |   |   |
| Stage 2                                    | 319          | -<br>16010-1906-1906 | -<br>                                     |   | il iomenadas auks                       |
| Platoon blocked, % Nov Cap-1 Maneuver      | 69           | 379                  | 785 <b>-</b>                              |   |   |
| Nov Cap-1 Maneuver                         | 69           |                      |   |   |   |
| Stage 1                                    | 462          | -                    | <ul> <li></li></ul>                       | **************************************  | 111111111111111111111111111111111111111 |
| Stage 2                                    | 295          |                      |   |   |   |
| pproach                                    | EB           |                      | NB NB                                     | SB  |   |
| ICM Control Delay, s                       | 30.8         |                      | 0.2                                       | 0   |   |
| ICM LOS                                    | D. I         |                      |   |   |   |
| //inor Lane/Major Mvmt                     | NBL N        | BTEBLM S             | BT SBR                                    | C. 186 Marian — Marian — Marian Japan — Ta<br>— Tarang Santan — Marian — M | and professors and the                  |
| Capacity (veh/h)                           | 785          | - 179                |   | in one seemen seeme  |   |
| ICM Lane V/C Ratio                         | 0.025        | - 0.223              |   |   |   |
| ICM Control Delay (s)                      | 9.7          | 0 30.8               | <u> </u>                                  | MANAGERANGERANGERANGERANGERANGERANGERANGE   |   |
| ICM Lane LOS                               | Α            | A D<br>- 0.8         | La liga de Parinda de Combre de La        |   | in iirile ilelia ja                     |

| Int Delay, siveh   0.8   |  |  |   |  |  |   |  |
|--|--|--|---|--|--|---|--|
| Movement   | Intersection   |  |   |  |  |   |  |
| Vol. veh/h         507         17         21         733         16         25           Conflicting Peds, #hr         0         0         0         0         0         0           Sign, Control         Free         Free         Free         Slop         Stop         Stop         None         N  | Int Delay, s/veh 0.8   |  |   |  |  | ~   |  |
| Vol. veh/h         507         17         21         733         16         25           Conflicting Peds, #hr         0         0         0         0         0         0           Sign, Control         Free         Free         Free         Stop         Stop         Stop         Stop         Stop         None         N  |  |  |   |  |  |   |  |
| Conflicting Peds, #/hr   | Movement   | EBT EE   | IR WBL  | WBT:   | NBL  | NBR   |  |
| Sign Control   Free   Free   Free   Free   Free   Stop   Stop  | Vol, veh/h   | 507  | 17 21   | 733  | 16   | 25  | an au an an an an an an a  |
| RT Channelized - None - None - None Storage Length 0 0 0 0 0 0 0 - 0 0 0 0   | Conflicting Peds, #/hr   | 0  | 0 0   |  | •  | -   |  |
| Storage Length   |  |  |   | // / / / / / / / / / / / / / / / / / /             | Stop   | ******************************                        |  |
| Veh in Median Storage, # 0 0 0 0 - Grade, % 0 - 0 0 0 - 0 0 0 - 0 0 0 0 0 0 0 0 0  |  | - No   | ne -  | None   | _<br>6:000098080808080207000   | None  | sia ningka a persenggang panagan gapur   |
| Grade, %   0   |  |  |   | ^  |  |   |  |
| Peak Hour Factor 94 94 94 94 92 92 92 Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |  | in in the Comment  |   |  |  | -<br>   |  |
| Heavy Vehicles, %   2   2   2   2   2   2   2   2   2  |  | LABORAGEN SATERTS PARKET TRANSPORTER   | 94 94   |  |  | 92  |  |
| Mynth Flow         539         18         22         780         17         27           Major/Minor         Major M   |  |  |   |  |  |   |  |
| Conflicting Flow All 0 0 557 0 1372 548  Stage 1 548  Stage 2 824  Critical Hdwy 4.12 - 6.42 6.22  Critical Hdwy Stg 1 5.42  Critical Hdwy Stg 2 5.42  Follow-up Hdwy 1014 - 161 536  Stage 1 1014 - 161 536  Stage 2 1014 - 155 536  Mov Cap-1 Maneuver - 1014 - 155 536  Mov Cap-2 Maneuver 1014 - 155 536  Mov Cap-2 Maneuver 1014 - 155 536  Approach FB WB NB  HCM Control Delay, s 0 0.2 20.7  HCM LOS  Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT  Capacity (veh/h) 274 - 1014 -   | Mvmt Flow  | 539  |   |  | 17   |   |  |
| Conflicting Flow All 0 0 557 0 1372 548  Stage 1 548  Stage 2 824  Critical Hdwy 4.12 - 6.42 6.22  Critical Hdwy Stg 1 5.42  Critical Hdwy Stg 2 5.42  Follow-up Hdwy 1014 - 161 536  Stage 1 1014 - 161 536  Stage 2 1014 - 155 536  Mov Cap-1 Maneuver - 1014 - 155 536  Mov Cap-2 Maneuver 1014 - 155 536  Mov Cap-2 Maneuver 1014 - 155 536  Approach FB WB NB  HCM Control Delay, s 0 0.2 20.7  HCM LOS  Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT  Capacity (veh/h) 274 - 1014 -   |  |  |   |  |  |   |  |
| Conflicting Flow All   | Maior/Minor  | Major1   | Maior2  |  | Minor1   |   |  |
| Stage 1  | The second secon |  |   | 0  |  | 548   |  |
| Stage 2  |  | -  |   | -  |  | -   |  |
| Critical Hdwy     Stg 1     -     -     -     5.42     -       Critical Hdwy     Stg 2     -     -     -     5.42     -       Follow-up Hdwy     -     -     -     3.518     3.318       Pot Cap-1 Maneuver     -     -     1014     -     161     536       Stage 1     -     -     -     -     -     -       Stage 2     -     -     -     -     -     -       Mov Cap-1 Maneuver     -     -     -     155     536       Mov Cap-2 Maneuver     -     -     -     155     -       Stage 1     -     -     -     -     -     -       Stage 2     -     -     -     -     -     -     -       Stage 1     -   | Stage 2  |  |   |  | 11 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1   |   |  |
| Critical Hdwy Stg 2  |  | _  | - 4.12  | _  |  | 6.22  |  |
| Follow-up Hdwy 2.218 - 3.518 3.318  Pot Cap-1 Maneuver 1014 - 161 536  Stage 1 579 579  Stage 2 431 155 536  Mov Cap-1 Maneuver 1014 - 155 536  Mov Cap-1 Maneuver 1014 - 155 536  Mov Cap-2 Maneuver 155 536  Mov Cap-2 Maneuver 155 536  Stage 1 579 145  Stage 2 415 - 579  Approach EB WB NB  HCM Control Delay, s 0 0.2 20.7  HCM LOS C   |  |  |   |  |  | r ignigg (f. <b>-</b> agg. c.)                        |  |
| Pot Cap-1 Maneuver 1014 - 161 536    Stage 1   | Critical Howy Stg 2  |  |   |  |  | 2240  |  |
| Stage 1  |  |  | 3230,496234304254503430387162646545457637643  |  | >>< > < 4 < 0 < 0 < 0 < 0 < 0 < 0 < 0 < 0 < 0  | \$8.48.58.58.68.58.5.73.83.5.1.783.583.0.7.553.533.   | LEGICAL SESTIMAÇÃA COM LA CASE A TRANS   |
| Stage 2  |  |  |   |  |  |   |  |
| Platon blocked   %   |  | -  |   | -  |  | -   |  |
| Mov.Cap-2 Maneuver       -       -       -       579       -         Stage 1       -       -       -       415         -       Stage 2       -       -       415    Approach EB WB NB HCM Control Delay, s       0       0.2 20.7 HCM LOS Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT Capacity (veh/h) 274 - 1014 - 1014 -   | Platoon blocked) %   | Substitution   |   | en come con la |  | Chelmoder (de Salesa)<br>Marie Castalle (de National) |  |
| Stage 2  | Mov Cap-1 Maneuver   | -  | - 1014  | -  |  | 536   | -c   |
| Stage 2  |  |  |   |  |  |   |  |
| Approach EB WB NB  HCM Control Delay, s 0 0.2 20.7  HCM LOS C  Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT  Capacity (veh/h) 274 1014 -  |  | -  | Berkeskanskanskanskanskanskanskanskanskanskan | -<br>!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!          |  |   |  |
| HCM Control Delay, s 0 0.2 20.7  HCM LOS:  Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT  Capacity (veh/h) 274 1014 -  | Stage 2  |  |   |  | A40 A40 A40  |   |  |
| HCM Control Delay, s 0 0.2 20.7  HCM LOS:  Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT  Capacity (veh/h) 274 1014 -  |  |  |   |  |  |   |  |
| HCM LOS Company Compan |  |  | ***************************************       |  |  |   |  |
| Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT Capacity (veh/h) 274 1014 -  |  | 0  | 0.2   | noglasii siimmista täyiha                          | 20.7   |   | LEGATE CONNECTION OF THE CONSTRUCTION OF THE C |
| Capacity (veh/h) 274 1014 -  | HCM LOS REGULERATIONS AND THE RESERVE OF THE RESERV |  | éhekieltakatinai.                             |  | icini ika kali Yuli i  |   | ārāsā Prā irmētākas  |
| Capacity (veh/h) 274 1014 -  |  |  |   |  |  |   |  |
| Capacity (veh/h) 274 1014 -  |  | they beginned and a problem of the British Bri |   |  |  |   | and the State of State of  |
|  | Capacity (veh/h) 274   |  |   |  | A DOMENTA DE PROPERTA DE LA PROPERTA DEL PROPERTA DEL PROPERTA DE LA PROPERTA DEL PROPERTA DEL PROPERTA DE LA P |   | CELLAGE COMPANIED DO GENERAL MESTE SENT  |
|  |  |  | - 0.022 -                                     |  |  |   |  |
|  |  |  | **************************************        |  |  |   |  |
| HCM 95th %tile Q(veh) 0.6 0.1 -  |  |  |   |  | energeneren er en  |   |  |

| Intersection  |  | 1977 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970<br>1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970  |   |  |   |
|---|--|---|---|--|---|
| Int Delay, s/veh  | 3.4  |   |   |  |   |
|   | delining design  |   |   |  |   |
| Movement  | EBL EBT  | WBT WBR   | SBL                                     | SBR  |   |
| Vol. veh/h  | 0 9 9  | 4 29  | 26                                      | 0.000  |   |
| Conflicting Peds, #/hr  | 0 0  | 0 0   | 0                                       | 0  | YYLINYYYYYGY CHANNYNYG YONONG NOLCHWANY YN CHONNÔD GANAC. |
| Sign Control  | Free Free  | Free Free   | Stop                                    | Stop   |   |
| RT Channelized  | - None   | - None  | -                                       | None   |   |
| Storage Length  |  |   | 0                                       |  |   |
| Veh in Median Storage, #<br>Grade, %  | - 0<br>- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 0 -<br>0 - 5 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6  | 0                                       | -<br>An Senizaria  |   |
| Peak Hour Factor  | 92 92  | 92 92   | 92                                      | 92   |   |
| Heavy Vehicles, %   | 2 2  | 2 2   | 2                                       | 2  |   |
| Mvmt Flow   | 0 10   | 4 32  | 28                                      | 0  |   |
|   |  |   |   |  |   |
| Major/Minor   | Major1   | Major2  | Minor2                                  |  |   |
| Conflicting Flow All  | 36 0 (   | 0.00  | 30                                      | 20   |   |
| Stage 1   |  |   | 20                                      | =  | )   |
| Stage 2   |  |   | 10                                      |  |   |
| Critical Hdwy   | 4.12<br>Dunhardanas saga saga saga basa basa   | enednasionalista salah periodikan periodikan periodikan periodikan periodikan periodikan periodikan periodikan<br>Periodikan periodikan periodikan periodikan periodikan periodikan periodikan periodikan periodikan periodikan | 6.42<br>5.42                            | 6.22   |   |
| Critical Hdwy Stg 1<br>Critical Hdwy Stg 2  | edinariam presentation (despresen  |   | 5.42<br>5.42                            |  |   |
| Follow-up Hdwy  | 2.218  |   | 3,518                                   | 3.318  |   |
| Pot Cap-1 Maneuver  | 1575 -   |   | 984                                     | 1058   | -   |
| Stage 1   |  |   | 1003                                    |  |   |
| Stage 2   | History Hydrians, populario describato el Certello, cielo R                          | ·<br><br>   | 1013                                    | _<br>INCIDENCE and contenting delay  | poladin osiesponnen president                             |
| Platoon blocked, %  | 4F7F   |   | 984                                     | 1058   |   |
| Mov Cap-1 Maneuver Mov Cap-2 Maneuver   | 1575<br>   |   | 904<br>984                              | 1090   |   |
| Stage 1   |  | HNOUS ENGLY REPRESIDENTIAN AND STOCKUM<br>-   | 1003                                    | ang kalang ang kalang ang ang ang ang ang ang ang ang ang  | form (1) The service result from a suppose                |
| Stage 2   | mätti jungani  |   | 1013                                    | ministra de la composición dela composición de la composición de la composición de la composición dela composición dela composición de la composición dela composición de la c |   |
| - wiki fesikakan dalaman da da tari da da da karan da                     | #\$\$###################################   | on parameter and transfer to an extension of a territorial state of the second state of the second second secon   | **************************************  | 2 v8 · v · e eu 18 4 5 2 71 5 4 7 41 5 2 7 1 1 6 6 4 5 4 5 5 5 5 5 5 5   | \$100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                 |
| Approach  | EB   | WB  | SB                                      |  |   |
| HCM Control Delay, s  | 0  | 0   | 8.8                                     |  |   |
| HCM LOS   |  |   | A                                       |  |   |
| A 6 2007 C A 2000 A 400 C A 4000 A 5000 A 4 4 5 C A 6 C A 6 C A 6 C A 6 A 600 A 600 A 600 A 600 A 600 A 600 A | · //www.d.//333.03.04.0348.040.1**00(\$703273797274) 03030/870.03 (303038666666.0.0) | Miller (Alberta), are correct areas on a conservation of conservation and conservation in 1999 (1999) (   | 1.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4 |  |   |
| Minor Lane/Major Mymt   | EBL' EBT WBT V   | VBR SBLn1   |   |  | 10 <u>2 3</u> 3 3 3 2 3 3                                 |
| Capacity (veh/h)  | 1575 - <b>-</b>  | - 984   |   |  |   |
| HCM Lane V/C Ratio  |  | - 0.029   | ng nga                                  |  |   |
| HCM Control Delay (s)   | 0  | - 8.8   | ///II://XIII/II/XIII/II/XII/XII/XII     |  |   |
| HCM Lane LOS  | Anne in it   | A   |   |  |   |
| HCM 95th %tile Q(veh)   | 0  | - 0.1   |   |  |   |

|  | •               |                    |                 |  | <b>—</b>      | •              | •   | <b>+</b>                         |  |   | ·                                       |   |
|--|-----------------|--------------------|-----------------|--|---------------|----------------|---|----------------------------------|--|---|---|---|
| Movement                               | EBL             | <b>→</b><br>EBI    | <b>¥</b><br>EBR | ₩BL  | WBT           | WBR            | NBL   | I<br>NBT                         | /<br>NBR                                       | SBL                                       | <b>▼</b><br>SBT                         | SBF                                     |
| Lane Configurations                    | ኻ               | ĵ»                 |                 | ነ  | ቕ             |                | ሻ   | <u>}</u>                         |  | ሻ   | ĵ <sub>e</sub>                          |   |
| Volume (veh/h)                         | 39              | 177                | 192             | 56   | 176           | 75             | 197   | 553                              | 80   | 66  | 564                                     | 56                                      |
| Number                                 | 7               | 4                  | 14              | 3  | 8             | 18             | 5   | 2                                | 12   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,    | 6                                       | 16                                      |
| Initial Q (Qb), veh                    | 0               | Ó                  | Ö               | 0  | 0             | 0              | 0   | 0                                | 0  | 0   | 0                                       | C                                       |
| Ped-Bike Adj(A_pbT)                    | 1.00            |                    | 1.00            | 1.00   | er is land    | 1.00           | 1.00  |                                  | 1.00   | 1.00                                      | *************************************** | 1.00                                    |
| Parking Bus, Adj                       | 1.00            | 1.00               | 1.00            | 1.00   | 1.00          | 1.00           | 1.00  | 1,00                             | 1.00   | 1.00                                      | 1.00                                    | 1.00                                    |
| Adj Sat Flow, veh/h/ln                 | 1863            | 1788               | 1900            | 1863   | 1863          | 1900           | 1900  | 1900                             | 1938   | 1891                                      | 1891                                    | 1928                                    |
| Adj Flow Rate, veh/h                   | 40              | 181                | 196             | 57   | 180           | 77             | 201   | 564                              | 82   | 67  | 576                                     | 57                                      |
| Adj No. of Lanes                       | 1               | idelsuberdend<br>1 | 0               | 1  | 1             | 0              | #### <b>##</b> ############################## | 1                                | 0  | 1   | 1                                       |   |
| Peak Hour Factor                       | 0.98            | 0.98               | 0.98            | 0.98   | 0.98          | 0.98           | 0.98  | 0.98                             | 0.98   | 0.98                                      | 0.98                                    | 0.98                                    |
| Percent Heavy Veh, %                   | 2               | 2                  | 2               | 2  | 2             | 2              | 2   | 2                                | 2  | 2   | 2                                       | 2                                       |
| Cap, ven/h                             | 311             | 253                | 274             | 199  | 399           | 171            | 330   | 772                              | 112  | 274                                       | 750                                     | 74                                      |
| Cap, vering                            | 0.32            | 0.32               | 0.32            | 0.32   | 0.32          | 0.32           | 0.07  | 0.48                             | 0.48   | 0.04                                      | 0.44                                    | 0.44                                    |
| Sat Flow, veh/h                        | 1118            | 786                | 852             | 1002   | 1239          | 530            | 1810  | 1622                             | 236  | 1801                                      | 1694                                    | 168                                     |
|  |                 |                    |                 | 57   |               |                | 201   |                                  | 646  | 67  |   | 633                                     |
| Grp Volume(v), veh/h                   | 40              | 0                  | 377             |  | 0             | 257            |   | 0                                | 046<br>1858                                    | 07<br>1801                                | 0                                       |   |
| Grp Sat Flow(s),veh/h/lin              | 1118            | 0                  | 1638            | 1002   | 0             | 1769           | 1810  | \$ 15 c5 c541 A1 cc5 c, c* 15 c5 |  | * A . C                                   | C1452141142142144124622                 | 1861                                    |
| Q Serve(g_s), s                        | 2.7             | 0.0                | 18.3            | 4.8  | 0.0           | 10.4           | 0.0   | 0.0                              | 25.2   | 0.0                                       | 0.0                                     | 26.0                                    |
| Cycle Q Clear(g_c), s                  | 13,1            | 0,0                | 18.3            | 23.1   | 0.0           | 10.4           | 0.0   | 0.0                              | 25.2   | 0.0                                       | 0.0                                     | 26.0                                    |
| Prop In Lane                           | 1.00            |                    | 0.52            | 1.00   |               | 0.30           | 1.00  |                                  | 0.13   | 1.00                                      |   | 0.09                                    |
| Lane Grp Cap(c), veh/h                 | 311             | 0                  | 528             | 199  | 0             | 570            | 330   | 0                                | 884  | 274                                       | 0                                       | 824                                     |
| V/C Ratio(X)                           | 0.13            | 0.00               | 0.71            | 0.29   | 0.00          | 0.45           | 0.61  | 0.00                             | 0.73   | 0.24                                      | 0.00                                    | 0.77                                    |
| Avail Cap(c_a), veh/h                  | 483             | 0                  | 779             | 353  | 0             | 842            | 445   | 0                                | 884  | 389                                       | 0                                       | 824                                     |
| HCM Platoon Ratio                      | 1.00            | 1.00               | 1.00            | 1.00   | 1.00          | 1.00           | 1.00  | 1.00                             | 1.00   | 1.00                                      | 1.00                                    | 1.00                                    |
| Upstream Filter(I)                     | 1.00            | 0.00               | 1.00            | 1.00   | 0.00          | 1.00           | 1.00  | 0.00                             | 1.00   | 1.00                                      | 0.00                                    | 1.00                                    |
| Uniform Delay (d), s/veh               | 29.5            | 0.0                | 27.0            | 37.1   | 0.0           | 24.3           | 34.8  | 0.0                              | 19.0   | 31.6                                      | 0.0                                     | 21.3                                    |
| Incr Delay (d2), s/veh                 | 0.2             | 0.0                | 1,8             | 0.8  | 0.0           | 0.6            | 1.8   | 0.0                              | 5.3  | 0.5                                       | 0.0                                     | 6.8                                     |
| Initial Q Delay(d3),s/veh              | 0.0             | 0.0                | 0.0             | 0.0  | 0.0           | 0.0            | 0,0   | 0.0                              | 0.0  | 0.0                                       | 0.0                                     | 0.0                                     |
| %ile BackOfQ(50%),veh/ln               | 8.0             | 0.0                | 8.5             | 1.4  | 0.0           | 5.2            | 4.9   | 0.0                              | 14.2   | 1.5                                       | 0.0                                     | 14.7                                    |
| LnGrp Delay(d),s/veh                   | 29.7            | 0.0                | 28.8            | 37.9   | 0.0           | 24.8           | 36.6  | 0.0                              | 24.3   | 32.1                                      | 0.0                                     | 28.1                                    |
| LnGrp LOS                              | C               |                    | C               | D  |               | C              | D   |                                  | C  | C   |   | С                                       |
| Approach Vol, veh/h                    |                 | <b>41</b> 7        |                 |  | 314           |                |   | 847                              |  |   | 700                                     |   |
| Approach Delay, s/veh                  |                 | 28.9               |                 |  | 27.2          |                |   | 27.2                             |  | erije bidiji                              | 28.5                                    |   |
| Approach LOS                           |                 | С                  |                 |  | С             | •              |   | С                                |  |   | C                                       |   |
| Timer                                  | 1               | 2                  | 3               | 4  | 5             | 6              | 7   | 8                                |  |   |   |   |
| Assigned Phs                           | 1               | 2                  |                 | 4  | 5             | 6              |   | 8                                |  |   |   |   |
| Phs Duration (G+Y+Rc), s               | 8.3             | 48.0               |                 | 34.1   | 11.3          | 45.0           |   | 34.1                             |  |   |   |   |
| Change Period (Y+Rc), s                | 5.0             | 5.0                | erennes (900)   | 5.0  | 5.0           | 5.0            |   | 5.0                              | 163 pro 12 12 12 12 12 12 12 12 12 12 12 12 12 |   |   | *************************************** |
| Max Green Setting (Gmax), s            |                 | 43.0               |                 | 43.0   | 12.0          | 40.0           |   | 43.0                             |  |   |   |   |
| Max Q Clear Time (g_c+l1), s           |                 | 27.2               |                 | 20.3   | 2.0           | 28.0           |   | 25.1                             | 201611111111111111111111111111111111111        | ere 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | ·maniesenesikileitiliit.                | 10152347(8(0/0/1))                      |
| Green Ext Time (p_c) s                 | 0.4             | 3.7                | iga di inha     | 4.3  | 0.5           | 3.2            |   | 4.0                              |  |   |   |   |
| ************************************** | 747             | 7.1                |                 | 1.0  | ٠.٠           | Y.E.           |   |                                  |  |   |   |   |
| Intersection Summary                   | pppsidiossilian | anda anda and      | ilio ae e e     | SPECIAL DESIGNATION OF THE SPECIAL PROPERTY OF THE SPE | north and the | ezan militaran | era<br>maj kongrejaj (i krain.                | irininan desselzza               | nien en en en                                  | ong beggining                             | ibinga da regulida                      | (takirona                               |
| HCM 2010 Ctrl Delay                    |                 |                    | 27.9            |  |               |                |   |                                  |  |   |   |   |
| HCM 2010 LOS                           |                 |                    | С               |  |               |                |   |                                  |  |   |   |   |

| Intersection                          |                |               |                     |  |   |  |
|---------------------------------------|----------------|---------------|---------------------|--|---|--|
| Int Delay, s/veh                      | 0              |               |                     | **************************************       |   | ************************************** |
|                                       |                |               |                     |  |   | Si debata di situati di Sibiliti.      |
| Movement                              | EBL            | EBR           | NBL NBT             | and the second of the second of the second   | SBT SBR   |  |
| Vol, veh/h<br>Conflicting Peds, #/hr  | 0              | 0             | 2 830<br>0 0        |  | 812 0 0 0<br>0 0  |  |
| Sign Control                          | Stop           | Stop          | Free Free           |  | Free Free   |  |
| RT Channelized                        | -              | None          | - None              | #  | - None  |  |
| Storage Length                        | 01.68          |               |                     |  |   |  |
| Veh in Median Storage, #<br>Grade, %  | 0<br>-2        | -             | - 0<br>2            |  | 0<br>2  |  |
| Peak Hour Factor                      | 95             | 95            | 95 · 95             | ANTING AND LANGUAGE PROPERTY.                | 95 95   | DAN SASAN RASID RESIDENTAL MARCHETT    |
| Heavy Vehicles, %                     | 2              | 2             | 2 2 874             |  | 2 2   |  |
| Mvmt Flow                             | 0              | 1             | 2 874               |  | 855 O   |  |
|                                       |                |               |                     |  |   |  |
| Major/Minor Conflicting Flow All      | Minor2<br>1733 | 855           | Major1<br>855 0     |  | lajor2  |  |
| Stage 1                               | 855            | -             |                     |  | - <del>-</del>  |  |
| Stage 2                               | 878            |               |                     |  |   |  |
| Critical Hdwy<br>Critical Hdwy Stg 1  | 6.02<br>5.02   | 6.02          | 4.12 -              |  | <br>AND STANDARD AND AND AND AND AND AND AND AND AND AN |  |
| Critical Hdwy Stg 2                   | 5.02           | -<br>-        |                     |  |   |  |
| Follow-up Hdwy                        | 3.518          | 3.318         | 2.218               |  |   |  |
| Pot Cap-1 Maneuver                    | 117<br>458     | 375           | . 785 <i>-</i>      |  | Gusharakakakakakakakakakakakaka                         |  |
| Stage 1<br>Stage 2                    | 430<br>448     | -             |                     |  |   |  |
| Platoon blocked, %                    |                |               |                     | e a e e e e e e e e e e e e e e e e e e      |   |  |
| Mov Cap-1 Maneuver                    | 116            | 375           | 785 -               | 7656-1814-1817-1817-1817-1817-1817-1817-1817 |   |  |
| Mov Cap-2 Maneuver<br>Stage 1         | 116<br>458     |               |                     |  |   |  |
| Stage 25 Health                       | 446            |               | and and the company |  | ## <b>#</b> #################################           |  |
|                                       |                |               |                     |  |   |  |
| Approach                              | EB             |               | NB                  |  | SB  |  |
| HCM Control Delay, s<br>HCM LOS       | 14.6<br>B      |               | 0                   |  |   |  |
| HUM LUS                               |                |               |                     |  |   |  |
| Minor Lane/Major Mvmt                 | NRI NA         | TEBLn1 S      | BT SBR              |  |   |  |
| Capacity (veh/h)                      | 785            | - 375         |                     |  |   |  |
| HCM Lane V/C Ratio                    | 0.003          | - 0.003       |                     |  |   |  |
| HCM Control Delay (s)                 | 9.6<br>A       | 0 14.6<br>A B | _                   |  | i Garage de Datas (de Garage de Cestado)                |  |
| HCM Lane LOS<br>HCM 95th %tile Q(veh) | 0<br>0         | - 0           |                     |  |   |  |
|                                       | v              | •             |                     |  |   |  |

|  | •  |                         | 7          | •                       | +                                       | •                                   | 1             | †   | <b>/</b>           | <b>/</b>               | Ţ                    | 4  |
|--|--|-------------------------|------------|-------------------------|---|-------------------------------------|---------------|---|--------------------|------------------------|----------------------|--|
| Movement                                     | EBL  | EBT                     | EBR        | WBL                     | WBT                                     | WBR                                 | NBL           | NBT   | NBR                | SBL                    | SBT                  | SBF  |
| Lane Configurations                          | ሻ  | ٦                       |            | ሻ                       | ቕ                                       |                                     | <b>ነ</b>      | <b>þ</b>  |                    | <b>`</b>               | <b>}</b>             | \$64566E136E17.4                             |
| Volume (veh/h)                               | 41   | 188                     | 201        | 59                      | 187                                     | 77                                  | 205           | 634   | 83                 | 70                     | 630                  | 62   |
| Number                                       | 7  | 4                       | 14         | 3                       | 8                                       | 18                                  | 5             | 2   | 12                 | 1                      | 6                    | 10   |
| Initial Q (Qb), veh                          | 0  | 0                       | O          | 0                       | 0                                       | 0                                   | 0             | 0   | 0                  | 0                      | 0                    |  |
| Ped-Bike Adj(A_pbT)                          | 1.00   |                         | 1.00       | 1.00                    |   | 1.00                                | 1.00          | \$4 <b>4</b> \$ \$4\$\$000 00 720 020 <b>33</b> 9\$00 | 1.00               | 1.00                   |                      | 1.00   |
| Parking Bus, Adj                             | 1.00   | 1.00                    | 1.00       | 1.00                    | 1.00                                    | 1.00                                | 1.00          | 1.00  | 1.00               | 1.00                   | 1.00                 | 1.0  |
| Adj Sat Flow, veh/h/ln                       | 1863   | 1788                    | 1900       | 1863                    | 1863                                    | 1900                                | 1900          | 1900  | 1938               | 1891                   | 1891                 | 192  |
| Adj Flow Rate, veh/h                         | 42   | 192                     | 205        | 60                      | 191                                     | 79                                  | 209           | 647   | 85                 | 71                     | 643                  | 6  |
| Adj No. of Lanes                             | 1  | 1                       | 0          | 1                       | 1                                       | 0                                   | 1             | 1   | 0                  | 1                      | 1                    | <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u> |
| Peak Hour Factor                             | 0.98   | 0.98                    | 0.98       | 0.98                    | 0.98                                    | 0.98                                | 0.98          | 0.98  | 0.98               | 0.98                   | 0,98                 | 0.9  |
| Percent Heavy Veh, %                         | 2  | 2                       | 2          | 2                       | 2                                       | 2                                   | 2             | 2   | 2                  | 2                      | 2                    | 15450120190401                               |
| Cap, veh/h                                   | 316  | 266                     | 284        | 199                     | 420                                     | 174                                 | 268           | 767   | 101                | 207                    | 735                  | 7,   |
| Arrive On Green                              | 0.34   | 0.34                    | 0.34       | 0.34                    | 0.34                                    | 0.34                                | 0.07          | 0.47  | 0.47               | 0.04                   | 0.43                 | 0.43   |
| Sat Flow, veh/h                              | 1105   | 793                     | 846        | 983                     | 1253                                    | 518                                 | 1810          | 1646  | 216                | 1801                   | 1695                 | 160  |
| Grp Volume(v), veh/h                         | 42   | 0                       | 397        | 60                      | 0                                       | 270                                 | 209           | 0   | 732                | 71                     | 0                    | 70€  |
| Grp Sat Flow(s),veh/h/ln                     | 1105   | 0                       | 1639       | 983                     | 0                                       | 1771                                | 1810          | 0   | 1862               | 1801                   | 0                    | 186  |
| Q Serve(g_s), s                              | 2.9  | 0.0                     | 19.6       | 5.3                     | 0.0                                     | 11.0                                | 2.9           | 0.0   | 31.9               | 0.0                    | 0.0                  | 32.0   |
| Cycle Q Clear(g_c), s                        | 13.9   | 0.0                     | 19.6       | 24.9                    | 0.0                                     | 11,0                                | 2.9           | 0.0   | 31.9               | 0.0                    | 0.0                  | 32.0   |
| Prop In Lane                                 | 1.00   | CELTIFICATEDIA PILEBARA | 0.52       | 1.00                    | A A C A C A C A C A C A C A C A C A C A | 0.29                                | 1.00          |   | 0.12               | 1.00                   |                      | 0.09   |
| Lane Grp Cap(c), veh/h                       | 316  | 0.0                     | 550        | 199                     | 0                                       | 594                                 | 268           |   | 867                | 207                    |                      | 807  |
| V/C Ratio(X)                                 | 0.13   | 0.00                    | 0.72       | 0.30                    | 0.00                                    | 0.45                                | 0.78          | 0.00  | 0.84               | 0.34                   | 0.00                 | 0.88   |
| Avail Cap(c_a), veh/h                        | 461  | 0                       | 763        | 327                     | 0                                       | 825                                 | 379           | 0   | 867                | 317                    | 0                    | 807  |
| HCM Platoon Ratio                            | 1.00   | 1.00                    | 1.00       | 1.00                    | 1.00                                    | 1.00                                | 1.00          | 1.00  | 1.00               | 1.00                   | 1.00                 | 1.00   |
| Upstream Filter(I)                           | 1.00   | 0.00                    | 1.00       | 1.00                    | 0.00                                    | 1.00                                | 1.00          | 0.00  | 1.00               | 1.00                   | 0.0                  | 1,0  |
| Uniform Delay (d), s/veh                     | 29.5   | 0.0                     | 26.9       | 37.8                    | 0.0                                     | 24.1                                | 39.1          | 0.0   | 21.7               | 39.2                   | 0.0                  | 23.  |
| Incr Delay (d2), s/veh                       | 0.2  | 0.0                     | 2.1        | 0.8                     | 0.0                                     | 0.5                                 | 6.6           | 0.0   | 9.8                | 1.0                    | 0.0                  | 12.  |
| Initial Q Delay(d3),s/veh                    | 0.0  | 0.0                     | 0.0        | 0.0                     | 0.0                                     | 0.0                                 | 0.0           | 0.0   | 0.0                | 0.0                    | 0.0                  | 0.0  |
| %ile BackOfQ(50%),veh/in                     | 0.9  | 0.0                     | 9.1        | 1.5                     | 0.0                                     | 5.5                                 | 5.6           | 0.0   | 18.6               | 1:8                    | 0.0                  | 19.  |
| LnGrp Delay(d),s/veh                         | 29.7   | 0.0                     | 29.0       | 38.7                    | 0.0                                     | 24.6                                | 45.7          | 0.0   | 31.5               | 40.2                   | 0.0                  | 36.  |
| LnGrp LOS                                    | C  |                         | C          | D                       |   | С                                   | D             |   | C                  | D                      |                      | Ι  |
| Approach Vol, veh/h                          |  | 439                     |            | -                       | 330                                     |                                     |               | 941   |                    |                        | 777                  |  |
| Approach Delay, s/yeh                        |  | 29.1                    |            |                         | 27.2                                    |                                     |               | 34.7  |                    |                        | 37.0                 |  |
| Approach LOS                                 | anii taabaa aa a | C                       | mnunskesk  | 12:29419949949919419469 | С                                       | # 11465 # No. 17516 9 25 12 12 12 1 |               | С   | ****************** | 2000 200 480 4044 4044 | D                    |  |
| Timer  | 1  | , ,                     | 3          | 4                       | 5                                       | 6                                   | 7             | 8   |                    |                        |                      |  |
| Assigned Phs                                 | 1  | 2                       |            | 4                       | 5                                       | 6                                   |               | 8   |                    |                        |                      |  |
| Phs Duration (G+Y+Rc), s                     | 8.4  | 48.0                    |            | 36.0                    | 11.4                                    | 45.0                                |               | 36.0  |                    |                        |                      |  |
| Change Period (Y+Rc), s                      | 5.0  | 5.0                     | 0.6769.000 | 5.0                     | 5.0                                     | 5.0                                 |               | 5.0   |                    |                        |                      |  |
| Max Green Setting (Gmax), s                  |  | 43.0                    |            | 43.0                    | 12.0                                    | 40.0                                |               | 43.0  |                    |                        |                      |  |
| Max Q Clear Time (g_c+l1), s                 |  | 33.9                    |            | 21.6                    | 4.9                                     | 34.0                                |               | 26.9  | 44GH0WHNNN         |                        | x:20001850007GGBISSG | io 012722 54 44 46 65.                       |
| Green Ext Time (p_c), s                      | 0.5  | 3.2                     |            | 4.5                     | 0.5                                     | 2.3                                 |               | 4.1   |                    |                        |                      |  |
| + +45 #4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 | nia castită                                    |                         |            |                         |   | uu (120 ) Palen (1761)              |               | w.c   |                    |                        |                      |  |
| Intersection Summary                         |  |                         | 004        |                         | safrasa sibatas                         |                                     | erenego didos |   | 000100000000       |                        |                      |  |
| HCM 2010 Ctrl Delay                          |  |                         | 33.4       |                         |   |                                     |               |   |                    |                        |                      |  |
| HCM 2010 LOS                                 |  |                         | С          |                         |   |                                     |               |   |                    |                        |                      |  |

| Infersection W  |                                       |                                  |   |   |  |                                 |
|---|---------------------------------------|----------------------------------|---|---|--|---------------------------------|
| Int Delay, s/veh  | 0                                     |                                  |   |   |  |                                 |
| Movement  | EBE                                   | EBR                              | NBL NBT                                 |   | -SBT SBR   |                                 |
| Vol, veh/h<br>Conflicting Peds, #/hr                              | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0                                | 2 922<br>0 0                            |   | 890 0<br>0 0   |                                 |
| Sign Control  | Stop                                  | Stop                             | Free Free                               |   | 0 0<br>Free Free   |                                 |
| RT Channelized<br>Storage Length                                  | 0                                     | None                             | - None                                  | . Egypts (sissi <b>nggan</b> epitaningen) | - None   | MGCASANCARROUSIDAME PRESIDENTAR |
| Veh in Median Storage, #  | 0                                     | -                                | - 0                                     |   |  |                                 |
| Grade, % Peak Hour Factor   | -2<br>95                              | -<br>95                          | 95 95                                   |   | 2  |                                 |
| Heavy Vehicles, %   | 2                                     | 2                                | 2 2                                     |   | 95 95<br>2 2   | i daga sumung polisikal         |
| Mvmt Flow   | 0                                     | 1                                | 2 971                                   |   | 937 0  |                                 |
| Major/Minor   | Minor2                                |                                  | Major1                                  |   | Major2   |                                 |
| Conflicting Flow All  | 1912                                  | 937                              | 937 0                                   |   | - 10 10 10 10 10 10 10 10 10 10 10 10 10   |                                 |
| Stage 1<br>Stage 2  | 937<br>975                            | _<br>!: 65:1953  61:1951  63:195 | <u>.</u> _                              |   | THE PROPERTY OF THE PARTY OF TH |                                 |
| Critical Hdwy   | 6.02                                  | 6.02                             | 4.12 -                                  |   |  |                                 |
| Critical Howy Stg 1<br>Critical Howy Stg 2                        | 5.02<br>5.02                          |                                  |   |   |  |                                 |
| Follow-up Hdwy  | 3.518                                 | 3.318                            | 2.218                                   |   |  |                                 |
| Pot Cap-1 Maneuver  | 92<br>423                             | 338                              | 731 -                                   |   |  |                                 |
| Stage 2   | 408                                   | -                                | 500514514550000000000000000000000000000 |   | MARIA KATALARI KATAL<br>   |                                 |
| Platoon blocked, % Mov Cap-1 Maneuver                             | 91                                    | 338                              | 731 -                                   |   |  |                                 |
| Mov Cap-2 Maneuver  | 91                                    |                                  |   |   |  |                                 |
| Stage 1   | 423<br>406                            | -                                | - <b>-</b>                              |   |  |                                 |
| EFFERINGPHOTOGOLOGICALIST AND |                                       |                                  |   |   |  |                                 |
| Approach  | EB                                    |                                  | NB                                      |   | SB   |                                 |
| HCM Control Delay, s<br>HCM LOS                                   | 15.7<br>C                             |                                  | 0                                       |   |  |                                 |
| inianimananimanimanimanimanimanimanimani                          |                                       |                                  |   |   |  | KHARBORN STINEHHRAPPE           |
| Minor Lane/Major Mvmt   | NBL NB                                |                                  | T SBR                                   |   |  |                                 |
| Capacity (veh/h)<br>HCM Lane V/C Ratio                            | 731<br>0.003                          | - 338<br>- 0.003                 |   |   |  |                                 |
| HCM Control Delay (s)   | 9.9 (                                 | 15.7                             |   |   |  |                                 |
| HCM Lane LOS<br>HCM 95th %tile Q(veh)                             | A                                     | V                                |   |   |  |                                 |
|   | •                                     | •                                |   |   | 4  |                                 |

|   | À               | -              | *                                 | •                   | -               | *                                  | •            | <b>†</b>   | <i>&gt;</i>                            | <b>/</b>     | <b>+</b>               | 1  |
|---|-----------------|----------------|-----------------------------------|---------------------|-----------------|------------------------------------|--------------|------------|--|--------------|------------------------|--|
| Movement  | EBL             | EBT            | EBR                               | WBL                 | WBT             | WBR                                | NBL          | NBT        | NBR                                    | SBL          | SBT                    | SBR  |
| Lane Configurations                                   | <b>\</b>        | <b>[-</b>      | (101.191. <b>001.1</b> 27.00+2.55 | <b>*</b>            | <b>}</b>        | 1343522_841F <u>-#8_151</u> 165386 | <b>`</b>     |            | :::::::::::::::::::::::::::::::::::::: | · <b>1</b> 5 | <b>j</b>               | HIERANIA COS                                   |
| Volume (veh/h)  | 48              | 193            | 201                               | 61                  | 191             | 77                                 | 205          | 635        | 83                                     | 70           | 632                    | 69   |
| Number  | 7               | 4              | 14<br>0                           | 3<br>               | 8               | 18<br>0                            | 5            | 2          | 12                                     | 1            | 6                      | 16   |
| Initial Q (Qb), veh<br>Ped-Bike Adj(A_pbT)            | 1 00            | 0              |                                   |                     | 0               | 1.00                               | 4.00         | 0.         | 100                                    | 1.00         | .0                     | 0  |
| Parking Bus, Adj                                      | 1.00<br>1.00    | 1.00           | 1.00<br>1.00                      | 1.00<br>1.00        | 1.00            | 1.00                               | 1.00<br>1.00 | 1.00       | 1.00<br>1.00                           | 1.00<br>1.00 | 1.00                   | 1.00<br>1.00                                   |
| Adj Sat Flow, veh/h/ln                                | 1863            | 1788           | 1900                              | 1863                | 1863            | 1900                               | 1900         | 1900       | 1938                                   | 1891         | 1891                   | 1928   |
| Adj Flow Rate, veh/h                                  | 49.             | 197            | 205                               | 62                  | 195             | 79                                 | 209          | 648        | 85                                     | 71           | 645                    | 70   |
| Adj No. of Lanes                                      | 1               | 1              | 200                               | 1                   | 1               | 0                                  | 1            | 1          | 03                                     | 1            | 1                      | 0  |
| Peak Hour Factor                                      | 0.98            | 0.98           | 0.98                              | 0.98                | 0.98            | 0.98                               | 0,98         | 0.98       | 0.98                                   | 0.98         | 0.98                   | 0.98   |
| Percent Heavy Veh, %                                  | 2               | 2              | 2                                 | 2                   | 2               | 2                                  | 2            | 2          | 2                                      | 2            | 2                      | 2  |
| Cap, veh/h  | 318             | 273            | 28 <b>4</b>                       | 200                 | 428             | 173                                | 257          | 762        | 100                                    | 203          | 722                    | 78   |
| Arrive On Green                                       | 0.34            | 0.34           | 0.34                              | 0.34                | 0.34            | 0.34                               | 0.07         | 0.46       | 0.46                                   | 0.04         | 0.43                   | 0.43   |
| Sat Flow, veh/h                                       | 1101            | 804            | 837                               | 979                 | 1261            | 511                                | 1810         | 1646       | 216                                    | 1801         | 1677                   | 182  |
| Grp Volume(v), veh/h                                  | 49              | 0              | 402                               | 62                  | 0               | 274                                | 209          | 0          | 733                                    | 71           | 0                      | 715  |
| Grp Sat Flow(s),veh/h/ln                              | 1101            | 0              | 1641                              | 979                 | 0               | 1773                               | 1810         | 0          | 1862                                   | 1801         | 0                      | 1859   |
| Q Serve(g_s), s                                       | 3.4             | 0.0            | 19.9                              | 5.5                 | 0.0             | 11.2                               | 3.6          | 0.0        | 32.4                                   | 0.0          | 0.0                    | 33.1   |
| Cycle Q Clear(g_c), s                                 | 14.6            | 0.0            | 19.9                              | 25.4                | 0.0             | 11.2                               | 3.6          | - 8-0.0    | 32.4                                   | 0.0          | 0.0                    | 33,1   |
| Prop In Lane  | 1.00            |                | 0.51                              | 1.00                |                 | 0.29                               | 1.00         |            | 0.12                                   | 1.00         |                        | 0.10   |
| Lane Grp Cap(c), veh/h                                | 318             | 0              | 557                               | 200                 | 0               | 602                                | 257          | 0          | 862                                    | 203          | 0                      | 800  |
| V/C Ratio(X)  | 0.15            | 0.00           | 0.72                              | 0.31                | 0.00            | 0.46                               | 0.81         | 0.00       | 0.85                                   | 0.35         | 0.00                   | 0.89   |
| Avail Cap(cla), veh/h                                 | 454             | 0,111          | 760                               | 321                 | 0               | 821                                | 367          | 0          | 862                                    | 312          | 0                      | 800  |
| HCM Platoon Ratio                                     | 1.00            | 1.00           | 1.00                              | 1.00                | 1.00            | 1.00                               | 1.00         | 1.00       | 1.00                                   | 1.00         | 1.00                   | 1.00   |
| Upstream Filter(I)                                    | 1.00            | 0.00           | 1.00                              | 1.00                | 0.00            | 1.00                               | 1.00         | 0.00       | 1.00                                   | 1,00         | 0.00                   | 1.00   |
| Uniform Delay (d), s/veh                              | 29.7            | 0.0            | 26.8                              | 38.0                | 0.0             | 24.0                               | 39.9         | 0.0        | 22.1                                   | 39.9         | 0.0                    | 24.5   |
| Incr Delay (d2), s/veh                                | 0.2<br>0.0      | 0.0<br>0.0     | 2,2<br>0.0                        | 0.9                 | 0.0<br>0.0      | 0.5<br>0.0                         | 8.9<br>0.0   | 0.0        | 10,3                                   | 1.0          | 0.0                    | 14.5   |
| Initial Q Delay(d3),s/veh<br>%ile BackOfQ(50%),veh/ln | 1.0             | 0.0            | 9.4                               | 1,5                 | 0.0             | 5.6                                | v.v<br>5.9   | 0.0<br>0.0 | 0.0<br>19.0                            | 0.0<br>1.8   | 0.0                    | 0.0  |
| LnGrp Delay(d),s/veh                                  | 29.9            | 0.0            | 9,4<br>29.0                       | 38.8                | 0.0             | 24.5                               | 48.8         | 0.0        | 32.4                                   | 41.0         | 0.0                    | 20.1<br>38.9                                   |
| LnGrp LOS   | 29.9<br>C       |                | 23.0                              | 30.0<br>D           |                 | 24.5<br>                           | 40.0<br>D    |            | 32.4<br>  C                            | 41.0<br>D    |                        | 30.9<br>D                                      |
| Approach Vol, veh/h                                   |                 | 451            |                                   |                     | 336             | <u> </u>                           |              | 942        | muna                                   |              | 786                    | unic po <u>P</u>                               |
| Approach Delay, s/veh                                 |                 | 29.1           |                                   |                     | 27.2            |                                    |              | 36.0       |  |              | 39.1                   |  |
| Approach LOS  |                 | C              |                                   |                     | 22<br>C         |                                    |              | D          |  |              | 00.1<br>D              |  |
| Timer   | - 1             | 'n             | 3                                 | ./                  | - 5             | 6                                  | 7            | - 8        |  |              | _                      |  |
| Assigned Phs  | 1               | 2              | J                                 | 4                   | 5               | 6                                  | /· /         | 8          |  |              |                        |  |
| Phs Duration (G+Y+Rc), s                              | 8.4             | 48.0           |                                   | 36.5                | 11.4            | 45.0                               |              | 36.5       |  |              |                        | 315 300 14 14 14 14 14 14 14 14 14 14 14 14 14 |
| Change Period (Y+Rc), s                               | 5.0             | 5.0            |                                   | 5.0                 | 5.0             | 5.0                                |              | 5.0        |  |              |                        |  |
| Max Green Setting (Gmax), s                           | 9.0             | 43.0           |                                   | 43.0                | 12.0            | 40.0                               |              | 43.0       |  |              |                        |  |
| Max Q Clear Time (g_c+I1), s                          | 2.0             | 34.4           |                                   | 21.9                | 5.6             | 35.1                               |              | 27.4       | anastati                               |              | anianiani              |  |
| Green Ext Time (p_c), s                               | 0.5             | 3.1            |                                   | 4.6                 | 0.4             | 2.0                                |              | 4.1        |  |              |                        |  |
|   |                 |                |                                   | T T                 |                 | 7                                  |              |            |  |              |                        |  |
| Intersection Summary                                  | ilia kan utu at | and the second | 010                               | i i ningers occioni | ing gias agains | 11.37 (13.1.53)                    | tentan san é |            | an walling and                         |              | 14 martina de la compa | Diffusion                                      |
| HCM 2010 Ctrl Delay                                   |                 |                | 34.6                              |                     |                 |                                    |              |            |  |              |                        |  |
| HCM 2010 LOS  |                 |                | С                                 |                     |                 |                                    |              |            |  |              |                        |  |

| ntersection                                |              |                  |  |                |  |
|--|--------------|------------------|--|----------------|--|
| Int Delay, s/veh                           | 0.5          |                  |  |                |  |
| Movement                                   | EBL          | EBR              | an a series and a construent and a construent and a series | BT             | SBT SBR  |
| Vol, veh/h<br>Conflicting Peds, #/hr       | 9 0<br>0     | 17<br>0          | 17 . 9<br>0  | 914<br>0       | 12<br>0 0  |
| Sign Control                               | Stop         | Stop             | Free F   | ree            | Free Free  |
| RT Channelized<br>Storage Length           | -            | None             | - No   | one            | - None   |
| Veh in Median Storage,                     | # 0          | -                | -  | 0              | н шеви шанов педпа шишкин да шевин жана как англам да изгледивания да шана предава<br>О —  |
| Grade, %                                   | -2<br>95     | 95               | 95   | -2<br>95       | 95 95  |
| Heavy Vehicles, %                          | 2 10 1       | 2                | 2  | 2              | $oldsymbol{2}_{i}$ , $oldsymbol{2}_{i}$ , $oldsymbol{2}_{i}$ , $oldsymbol{2}_{i}$  |
| Mvmt Flow                                  | 9            | 18               | 18 9   | 962            | 927 13   |
| Major/Minor                                | Minor2       |                  | Major1   | eri bedarási a | Major2   |
| Conflicting Flow All                       | 1932         | 934              | 940  | 0              |  |
| Stage 1                                    | 934<br>998   |                  | -  | -              |  |
| Critical Hdwy                              | 6.02         | 6.02             | 4.12   | # Tabani<br>-  | HEGEN DIGHT BONDON TOTAN DIGHT BETTER BE<br>   |
| Critical Hdwy Stg 1<br>Critical Hdwy Stg 2 | 5.02<br>5.02 |                  |  | jiranii i      |  |
| Follow-up Hdwy                             | 3.518        | 3.318            | 2.218  |                |  |
| Pot Cap-1 Maneuver<br>Stage 1              | 90<br>424    | 339              | 729  | -<br>1946-1946 |  |
| Stage 2                                    | 398          | -<br>-           | · -  | -              |  |
| Platoon blocked, %<br>Mov Cap-1 Maneuver   | 85           | 339              | 729  |                |  |
| Mov Cap-2 Maneuver                         | # # # 85 m   |                  |  |                |  |
| Stage 1<br>Stage 2                         | 424<br>377   |                  |  |                |  |
|  |              |                  |  |                | TE INTERNET BEFORE SEPTIME INTERNAL BUTO HAS SOLICES RESERVED REPRESENTATION DE LIBERTURA DE LIB |
| Approach                                   | EB ;         |                  | NB.  |                | · · · · · · · · · · · · · · · · · · ·  |
| HCM Control Delay, s<br>HCM LOS            | 30.7         |                  | 0.2  |                | O  |
|  |              |                  |  | Amionina       | numanamaanelaneamishooseenmisteridentaanesamaanishoosetsiseaseensiseese:/v   |
| Minor Lane/Major Mvmt                      |              | TEBLn1 S         | BT SBR   |                |  |
| Capacity (veh/h)<br>HCM Lane V/C Ratio     | 729<br>0.025 | - 167<br>- 0.164 |  |                | oodeelkaan kaa gaa kaa kaa kaa kaa ka ka ka ka ka ka ka  |
| HCM Control Delay (s)                      | 10.1         | 0 30.7           |  |                | ITHING COMMON COMES STEET TO A EXCEPTION STEELS THE PETER OF ENGINEERING OF UNITED AND A EX-   |
| HCM Lane LOS<br>HCM 95th %tile Q(veh)      | 0.1          | A D<br>- 0.6     |  |                |  |
| HOW SOUL WHIE CALACHI)                     | U. I         | - 0.0            |  |                |  |

|  |   |  | -  |  |  |
|--|---|--|--|--|--|
| Intersection   |   |  |  |  |  |
| Int Delay, s/veh 0.6   |   |  |  |  |  |
| nammana da Aliandria da Aliandri |   |  |  |  | ALES DE LA CONTRACTOR DE  |
| Movement   | EBT EBR   | WBL WBT  | NBL  | NBR  | er navi mieroj prajanjema este iraj  |
| Vol, veh/h<br>Conflicting Peds, #/hr   | 423 13 0<br>0 0   | 16 449 0<br>0 0                                      | 12<br>0  | 19<br>0  |  |
| Sign Control   | Free Free   | Free Free  | Stop   | Stop   |  |
| RT Channelized   | - None  | - None   | -  | None   | ***************************************  |
| Storage Length   |   |  | 0.5  | A Citab  |  |
| Veh in Median Storage, #   | 0 -   | - 0  | 0  | -<br>1000-2014   | Sambolital materialistic (Statement State)   |
| Grade, % Peak Hour Factor  | 0   | 98 98  | 92   | 92   |  |
| Heavy Vehicles, %  | 96 96<br>   | 2 2  | 2  | 2  |  |
| Mvmt Flow  | 432 13  | 16 458   | 13   | 21   |  |
|  |   |  |  |  |  |
| Major/Minor  | Major1  | Major2   | Minor1   |  |  |
| Conflicting Flow All   | 0 0   | 445 0  | 929  | 438  |  |
| Stage 1  | 00 ( 0.2 ) 1 ( 1.0 ) 1 ( 0. |  | 438  |  |  |
| Stage 2  |   |  | 491  |  |  |
| Critical Hdwy  |   | 4.12 -   | 6.42<br>5.42                                       | 6.22   |  |
| Critical Hdwy Stg 1<br>Critical Hdwy Stg 2   |   |  | 5.42   |  | SPEEDER GEVOURGER SEELENGEN  |
| Follow-up Hdwy   |   | 2.218  | 3.518  | 3.318  |  |
| Pot Cap-1 Maneuver   | — — — — — — — — — — — — — — — — — — —   | 1115 -   | 297  | 619  | **************************************   |
| Stage 1  | 49 64 Grand-Daile (1-90)  | reinipriisia jira aleiseen                           | 651  | ŵwii Kaleri  | uirdikulunieleid   |
| Stage 2  |   | OCENTRALIERE AND | 615  | andria de compressor de la compressor de |  |
| Platoon blocked, % Mov Cap-1 Maneuver  | Sea abberrikaā leivas takus<br>-  | Minister   | 291  | 619  |  |
| Mov Cap-2 Maneuver   |   |  | 291  |  |  |
| Stage 1  |   |  | 651  | -  | **************************************   |
| Stage 2  |   |  | 603  |  |  |
|  |   |  |  |  |  |
| Approach   | EB  | WB   | NB -   |  |  |
| HCM Control Delay, s   | 0   | 0.3  | 14.1   | Primateoromy alleganos de l'article  | PREFERENCE CONTENTS OF THE CON |
| HCM LOS  |   |  | В  |  |  |
|  |   |  |  |  |  |
|  |   | /BL WBT  |  |  |  |
| Capacity (veh/h) HCM Lane V/C Ratio  | 431 1°<br>0.078 0.0   | 115<br>215   |  |  |  |
| HCM Control Delay (s)  |   | 719<br>8.3 0   |  |  | ana na 1919 na bhuailte i Bh   |
| HCM Lane LOS   | Burry Fire Call   | A  |  |  |  |
| HCM 95th %tile Q(veh)  | 0.3   | 0 -  | man / an / Cacacacacacacacacacacacacacacacacacacac |  |  |

| Intersection  |  | or the state of th |   |  |   |
|---|--|--|---|--|---|
| Int Delay, s/veh  | 4  |  |   |  |   |
| Movement.   | nusuusissa kannassa maassa kannassa<br>Leela Est   | WBT WBR  | iniin suu suuri kaanaan ka<br>SBL                   | SBR                                    |   |
| Vol, veh/h  |  |  | 25  |  |   |
| Conflicting Peds, #/hr<br>Sign Control                              | 0 0<br>Free Free   | 0 0<br>Free Free   | 0<br>Stop   | 0<br>Stop                              |   |
| RT Channelized  | - None   | - None   | -<br>-  | None None                              |   |
| Storage Length  |  |  | # 15 # O  |  |   |
| Veh in Median Storage, #<br>Grade, %                                | - 0 ·  | 0 -<br>0 -   | 0<br>0  | -<br>-                                 |   |
| Peak Hour Factor  | 92 92  | 92 92  | 92  | 92                                     |   |
| Heavy Vehicles, % Mvmt Flow   | 2 2 2 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 2 2<br>2 29  | 2<br>27   | 2                                      |   |
|   |  |  |   |  |   |
| Major/Minor   | Major1   | Major2   | Minor2  |  |   |
| Conflicting Flow All Stage 1  | 32 0 0   |  | 18 46 4<br>17                                       | 17                                     |   |
| Stage 2   |  |  |   |  |   |
| Critical Hdwy<br>Critical Hdwy Stg 1                                | 4.12 -   |  | 6.42<br>5.42  | 6.22                                   | e. Becsubosodaman karanekan               |
| Critical Hdwy Stg 2   |  |  | 5.42  |  |   |
| Follow-up Hdwy Pot Cap-1 Maneuver                                   | 2 218<br>1580 -  |  | 3.518<br>1000                                       | 3.318<br>1062                          |   |
| Stage 1   |  |  | 1006  | 1002                                   |   |
| Stage 2<br>Platoon blocked, %                                       | reneralis de la companie de la comp<br>La companie de la companie de |  | 1022  |  |   |
| Mov Cap-1 Maneuver  | 1580 –   |  | 1000  | 1062                                   |   |
| Mov Cap-2 Maneuver<br>Stage 1                                       |  |  | 1000  |  |   |
| Stage 2   |  |  | 1006<br>1022  | Maria (1900)                           |   |
|   |  | AAAA AA A  | eximin eve+intex-matrocomino proprioto (12,5122,222 | ************************************** | manususususususususususususususususususus |
| Approach  | EB   | WB   | SB  |  | 1000                                      |
| HCM Control Delay, s<br>HCM LOS                                     | 0  |  | 8.7<br>A  |  |   |
| 1949 44 44 44 47 97 97 97 97 11 11 11 11 11 12 22 22 22 22 22 22 22 | nuncher (Allandard Bad (Kadad kadad kadad berkada) poety ya kadan (Armite) (Armite)  | rener protestatus in in anapagaya in in anab basa protesta neurondir.  |   |  |   |
| Minor Lane/Major Mvmt   |  |  |   |  |   |
| Capacity (veh/h) HCM Lane V/C Ratio                                 | 1580   | - 1000<br>- 0.027  |   |  |   |
| HCM Control Delay (s)   |  | - 8.7  |   |  | er om granderen sjeken isk stellte        |
| HCM Lane LOS<br>HCM 95th %tile Q(veh)                               |  | - 0.1  | m it linkly it il                                   |  |   |

|                                 | •                                       | -                         | •           | •           | +        | •            | 1                     | <b>†</b>                      | ~             | 7                               | <b>↓</b>                           | 1                                       |
|---------------------------------|---|---------------------------|-------------|-------------|----------|--------------|-----------------------|-------------------------------|---------------|---------------------------------|------------------------------------|---|
| Movement                        | EBL                                     | EBT                       | EBR         | WBL         | WBT.     | WBR          | NBL                   | NBT                           | NBR           | SBL                             | SBT                                | SBR                                     |
| Lane Configurations             | 75                                      | ₽                         |             | ካ           | 4        |              | ሻ                     | ₽                             |               | ሻ                               | 1→                                 |   |
| Volume (veh/h)                  | 70                                      | 266                       | 219         | 48          | 392      | 141          | 281                   | 733                           | 116           | 197                             | 557                                | 107                                     |
| Number                          | 7                                       | 4                         | 14          | 3           | 8        | 18           | 5                     | 2                             | 12            | 1                               | 6                                  | 16                                      |
| Initial Q (Qb), veh             | 0                                       | 0                         | 0           | 0           | 0        | 0            | 0                     | 0                             | 0             | 0                               | 0                                  | 0                                       |
| Ped-Bike Adj(A_pbT)             | 1.00                                    |                           | 1.00        | 1.00        |          | 1.00         | 1.00                  | *************                 | 1.00          | 1.00                            |                                    | 1.00                                    |
| Parking Bus, Adj                | 1.00                                    | 1.00                      | 1.00        | 1.00        | 1.00     | 1.00         | 1.00                  | 1.00                          | 1.00          | 1.00                            | 1.00                               | 1.00                                    |
| Adj Sat Flow, veh/h/ln          | 1863                                    | 1788                      | 1900        | 1863        | 1863     | 1900         | 1900                  | 1900                          | 1938          | 1891                            | 1891                               | 1928                                    |
| Adj Flow Rate, veh/h            | 74                                      | 283                       | 233         | 51          | 417      | 150          | 299                   | 780                           | 123           | 210                             | 593                                | 114                                     |
| Adj No. of Lanes                | 1                                       | 1                         | 0           | 1           | 1        | 0            | 1                     | 1                             | 0             | 1                               | 1                                  | 0                                       |
| Peak Hour Factor                | 0.94                                    | 0.94                      | 0.94        | 0.94        | 0.94     | 0.94         | 0.94                  | 0.94                          | 0.94          | 0.94                            | 0.94                               | 0,94                                    |
| Percent Heavy Veh, % Cap. veh/h | 2<br>121                                | 2<br>330                  | 2<br>272    | 2<br>132    | 2<br>476 | 2<br>171     | 2<br>265              | 2                             | 2             | 2<br>213                        | 2                                  | 2                                       |
| Arrive On Green                 | 0.36                                    | 0.36                      | 2/2<br>0.36 | 0.36        | 0.36     | 0.36         | 205<br>0.10           | 670<br>0.42                   | 106<br>0.42   |                                 | 617                                | 119                                     |
| Sat Flow, veh/h                 | 0.36<br>841                             | 908                       | 748         | 0.36<br>881 | 1309     | 0.36<br>471  | 1810                  | 1603                          | 253           | 0.08<br>1801                    | 0.40<br>1542                       | 0.40                                    |
| Grp Volume(v), veh/h            | 74                                      | 0                         | 516         | 51          |          | 567          |                       | ,, ,, , , , , , , , ,         |               |                                 |                                    | 296                                     |
| Grp Sat Flow(s), veh/h/ln       | 841                                     | 0                         | 1656        | 881         | 0<br>0   | 1780         | 299<br>1810           | 0                             | 903<br>1855   | 210<br>1801                     | 0                                  | 707<br>1838                             |
| Q Serve(g_s), s                 | 7.3                                     | 0.0                       | 31.7        | 6.2         | 0.0      | 32.7         | 11.0                  | 0.0                           | 46.0          | 8.8                             | 0.0                                | 41.2                                    |
| Cycle Q Clear(g_c) s            | 40.0                                    | 0.0                       | 31.7        | 37.9        | 0.0      | 32.7         | 11.0                  | 0.0                           | 46.0          | o.o<br>8.8                      | 0.0                                | 41.2                                    |
| Prop In Lane                    | 1.00                                    | U.U                       | 0.45        | 1.00        | U,U      | 0.26         | 1.00                  | U.U                           | 0.14          | 1.00                            | יט,ט                               | 0.16                                    |
| Lane Grp Cap(c), veh/h          | 121                                     | 0                         | 602         | 132         | 0        | 647          | 265                   | 0                             | 776           | 213                             | 0                                  | 735                                     |
| V/C Ratio(X)                    | 0.61                                    | 0.00                      | 0.86        | 0.39        | 0.00     | 0.88         | 1.13                  | 0.00                          | 1.16          | 0.99                            | 0.00                               | 0.96                                    |
| Avail Cap(c_a), veh/h           | 121                                     | o.oo                      | 602         | 132         | 0.00     | 647          | 265                   | 0.00                          | 776           | 213                             | 0.00                               | 735                                     |
| HCM Platoon Ratio               | 1.00                                    | 1.00                      | 1.00        | 1.00        | 1.00     | 1.00         | 1.00                  | 1.00                          | 1.00          | 1.00                            | 1.00                               | 1.00                                    |
| Upstream Filter(I)              | 1.00                                    | 0.00                      | 1.00        | 1.00        | 0.00     | 1.00         | 1,00                  | 0.00                          | 1.00          | 1.00                            | 0.00                               | 1.00                                    |
| Uniform Delay (d), s/veh        | 52.3                                    | 0.0                       | 32.4        | 49.9        | 0.0      | 32.7         | <b>4</b> 7.7          | 0.0                           | 32.0          | 49.0                            | 0.0                                | 32.2                                    |
| Incr Delay (d2); s/veh          | 8.7                                     | 0.0                       | 11.7        | 1.8         | 0.0      | 12.9         | 93.9                  | 0.0                           | 87.6          | 57.8                            | 0.0                                | 25.0                                    |
| Initial Q Delay(d3),s/veh       | 0.0                                     | 0.0                       | 0.0         | 0.0         | 0.0      | 0.0          | 0.0                   | 0.0                           | 0.0           | 0.0                             | 0.0                                | 0.0                                     |
| %ile BackOfQ(50%),veh/in        | 2.5                                     | 0.0                       | 16.4        | 1.6         | 0.0      | 18.4         | 14.9                  | 0.0                           | 42.4          | 9,8                             | 0.0                                | 25,9                                    |
| LnGrp Delay(d),s/veh            | 61.0                                    | 0.0                       | 44.1        | 51.7        | 0.0      | 45.6         | 141.5                 | 0.0                           | 119.6         | 106.8                           | 0.0                                | 57.2                                    |
| LnGrp LOS                       | ##E                                     |                           | D           | D           |          | D            | F                     |                               | M F           | F                               |                                    | E                                       |
| Approach Vol, veh/h             |   | 590                       |             |             | 618      |              |                       | 1202                          |               |                                 | 917                                |   |
| Approach Delay, s/veh           | 41414                                   | 46.2                      | ilidikidi   |             | 46.1     | pica distant |                       | 125.0                         |               |                                 | 68.5                               |   |
| Approach LOS                    |   | D                         |             |             | D        |              |                       | F                             |               | ******************************* | E                                  |   |
| Timer                           | 1                                       | 2                         | 3           | 4           | - 5      | 6            | 7                     | 8                             |               |                                 |                                    |   |
| Assigned Phs                    | 1                                       | 2                         |             | 4           | 5        | 6            |                       | 8                             |               |                                 |                                    |   |
| Phs Duration (G+Y+Rc), s        | 14.0                                    | 51.0                      |             | 45.0        | 16.0     | 49.0         |                       | 45.0                          |               |                                 |                                    | 100 00 00 00 00 00 00 00 00 00 00 00 00 |
| Change Period (Y+Rc), s         | 5.0                                     | 5.0                       |             | 5.0         | 5.0      | 5.0          |                       | 5.0                           | ,             |                                 |                                    |   |
| Max Green Setting (Gmax), s     | 9.0                                     | 46.0                      |             | 40.0        | 11.0     | 44.0         |                       | 40,0                          |               |                                 |                                    |   |
| Max Q Clear Time (g_c+l1), s    | 10.8                                    | 48.0                      | v. 2        | 42.0        | 13.0     | 43.2         |                       | 39.9                          |               |                                 |                                    |   |
| Green Ext Time (p_c), s         | 0.0                                     | 0.0                       |             | 0.0         | 0.0      | 0.4          | Gun en e              | 0.1                           |               |                                 |                                    |   |
| Intersection Summary            |   |                           |             |             |          |              |                       |                               |               |                                 |                                    |   |
| HCM 2010 Ctrl Delay             |   |                           | 80.8        |             |          |              | wd9:309               |                               |               | Hebrilla Hiji                   |                                    | diaaka:                                 |
| HCM 2010 LOS                    | *************************************** | . NEL 1941 11 1585 1111 1 | F           |             |          |              | The Dealer Seate (CC) | ··· (esere up () peptil () () | ACTION (1981) | eese*es+2  3  W46668            | eewer interteinte foliographe film | mis104,04,                              |

|  |  | <del></del>                                  |                        |  |   |  |
|--|--|--|------------------------|--|---|--|
| Intersection                               |  |  |                        |  |   |  |
| Int Delay, s/veh                           | 0.1  | 14.482.22.22.22.22.22.22.22.22.22.22.22.22.2 |                        |  |   | PRINTER MARKINGAT ARENTE MACK  |
|  |  |  |                        |  |   |  |
| Movement                                   | EBL  | EBR  | NBL NBT                |  | SBT SBR   |  |
| Vol, veh/h                                 | 0  | 9  | 2 1131                 | rais Poladia   | 822 2   |  |
| Conflicting Peds, #/hr                     | 0  | 0  | 0 0                    | ######################################   |   |  |
| Sign Control                               | Stop   | Stop   | Free Free              |  | Free Free   |  |
| RT Channelized                             | 0  | None   | - None                 |  | - None  |  |
| Storage Length<br>Veh in Median Storage, # | COCACO Chementala la la la la caco Coma lo Con |  | - 0                    |  | 0 -   |  |
| Grade, %                                   | , -2   |  | -<br>-<br>             |  | 0 -<br>2  |  |
| Peak Hour Factor                           | 90   | 90   | 90 90                  |  | 90 90   |  |
| Heavy Vehicles, %                          | 2  | 2  | 2 2                    |  | 2 2   |  |
| Mvmt Flow                                  | 0  | 10   | 2 1257                 | :4:455;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;  | 913 2   |  |
|  |  |  |                        |  |   |  |
| Major/Minor                                | Minor2   |  | Major1                 |  | Major2  |  |
| Conflicting Flow All                       | 2175   | 914  | 916 0                  |  | 0.5   |  |
| Stage 1                                    | 914  |  |                        |  |   |  |
| Stage 2                                    | 1261   |  |                        |  |   |  |
| Critical Hdwy                              | 6.02<br>5.02                                   | 6.02   | 4.12 -                 |  |   | Odustratika deletaka kali deletaka deletaka deletaka deletaka deletaka deletaka deletaka deletaka deletaka del |
| Critical Hdwy Stg 1<br>Critical Hdwy Stg 2 | 5.02   |  |                        | laine dan  |   |  |
| Follow-up Hdwy                             | 3.518  | 3,318  | 2.218 -                |  |   |  |
| Pot Cap-1 Maneuver                         | 65   | 348  | 745 -                  | \$41544111111111111111111111111111111111   |   | \$\$************************************   |
| Stage 1                                    | 433  |  |                        |  |   |  |
| Stage 2                                    | 307  |  |                        | Sansa san asan manan mataka kataba 1988  |   | 588 - 4775 AA888 AB BOO DETU 170 DOODLD  |
| Platoon blocked, %                         |  | 0.40   |                        |  |   |  |
| Mov Cap-1 Maneuver                         | 64<br>64                                       | 348  | 745 -                  |  |   |  |
| Mov Cap-2 Maneuver Stage 1                 | 433  |  | nimi inga panggara ing |  | uaesas Palles sacas Alainik<br>-  |  |
| Stage 2                                    | 304  |  |                        | di engarana  |   | digiri biriki b  |
|  | iantikisi di Talah di Hili                     |  |                        |  |   |  |
| Approach                                   | EB   | 1  | NB .                   | 100  | SB  |  |
| HCM Control Delay, s                       | <u>⊾5</u><br>15.7                              |  | 0                      |  | 0   |  |
| HCM LOS                                    | iii ka ka Galisa                               |  |                        |  |   |  |
| IV-TIPSTRAGRAMMENTERSHERED                 |  |  |                        |  |   | Minal all albantal anno accommen   |
| Minor Lane/Major Mvmt                      | NBL N  | BTEBLn1 S                                    | BT SBR                 |  |   |  |
| Capacity (veh/h)                           | 745  | - 348  | - ve.                  |  |   |  |
| HCM Lane V/C Ratio                         | 0.003  | - 0.029                                      |                        |  |   |  |
| HCM Control Delay (s)                      | 9.8  | 0 15.7                                       |                        | 921992 949 CITAL IS 47 CARL SERVER BASES CLASSES SELECTION (SANCES CLA | nessen and Francis de Anticz po poddiej (di i in principi) (diliki fali | iai ar rii mili keli met aran aran aran aran aran aran aran ara  |
| HCM Lane LOS                               | A  | A C  |                        |  |   | i nature messa e no i di cita  |
| HCM 95th %tile Q(veh)                      | 0  | - 0.1  |                        |  |   |  |

|  | J              | <b>→</b>                | <u> </u>    | <b>√</b>     | <b>—</b>                      | 4            | _                          | †                                  |   | <u> </u> | 1              | <b>-</b>                               |
|--|----------------|-------------------------|-------------|--------------|-------------------------------|--------------|----------------------------|------------------------------------|---|----------|----------------|--|
| Movement   | EBL            | EBT                     | EBR         | WBL          | WBT                           | WBR          | NBL                        | NBT                                | NBR                                       | SBL      | SBT            | SBR                                    |
| Lane Configurations  | ኣ              | 4                       | •           | <b>`</b>     | <b>^</b>                      |              | ነ ነ                        | <b>1</b>                           |   | <u>ች</u> | <b>}</b>       | - ODIX                                 |
| Volume (veh/h)   | 79             | 272                     | 219         | 50           | 397                           | 141          | 281                        | 734                                | 116                                       | 197      | 559            | 115                                    |
| Number   | 7              | 4                       | 14          | 3            | 8                             | 18           | 5                          | 2                                  | 12  | 1        | 6              | 16                                     |
| Initial Q (Qb), veh  | Q              | 0                       | . 0         | 0            | 0                             | 0            | 0                          | 0                                  | 0   | 0        | 0              | 0                                      |
| Ped-Bike Adj(A_pbT)  | 1.00           | Cappers visit before    | 1.00        | 1.00         | 00,500 tuto to co co cor 1799 | 1.00         | 1.00                       | TO THE TOTAL WATER AND AN ADVANCE. | 1.00                                      | 1.00     |                | 1.00                                   |
| Parking Bus, Adj   | 1.00           | 1.00                    | 1.00        | 1,00         | 1.00                          | 1.00         | 1.00                       | 1.00                               | 1.00                                      | 1.00     | 1.00           | 1.00                                   |
| Adj Sat Flow, veh/h/ln<br>Adj Flow Rate, veh/h   | 1863           | 1788                    | 1900        | 1863         | 1863                          | 1900         | 1900                       | 1900                               | 1938                                      | 1891     | 1891           | 1928                                   |
| Adj No. of Lanes   | 84<br>1        | 289<br>1                | 233         | 53           | 422                           | 150          | 299                        | 781                                | 123                                       | 210      | 595            | 122                                    |
| Peak Hour Factor   | 0.94           | 0.94                    | 0<br>0.94   | 1<br>0.94    | 1<br>0.94                     | 0<br>0.94    | 1<br>0.94                  | 1                                  | 0<br>************************************ | 1        | 1              | 0                                      |
| Percent Heavy Veh, %   | 0.54           | 0.94<br>2               | 0.94        | 0.94<br>2    | 0.94<br>2                     | 0.94<br>2    | 31313344488880011311311314 | 0.94                               | 0.94                                      | 0.94     | 0.94           | 0.94                                   |
| Cap, veh/h   | 118            | 334                     | 269         | 128          | 478                           | 170          | 2<br>258                   | 2<br>670                           | 2<br>106                                  | 2<br>213 | 2<br>609       | 2                                      |
| Arrive On Green  | 0.36           | 0.36                    | 0.36        | 0.36         | 0.36                          | 0.36         | 0.10                       | 0.42                               | 0.42                                      | 0.08     | 0.40           | 125                                    |
| Sat Flow, veh/h  | 837            | 918                     | 740         | 876          | 1313                          | 467          | 1810                       | 1603                               | 252                                       | 1801     | 1523           | 0.40<br>312                            |
| Grp Volume(v), veh/h   | 84             | 0                       | 522         | 53           | 0                             | 572          | 299                        | 0                                  | 904                                       | 210      | 0              | 717                                    |
| Grp Sat Flow(s) veh/h/ln   | 837            | ŭ i                     | 1658        | 876          | 0                             | 1780         | 1810                       | 0                                  | 1855                                      | 1801     | 0              | 1836                                   |
| Q Serve(g_s), s  | 6.9            | 0.0                     | 32.2        | 6.6          | 0.0                           | 33.1         | 11.0                       | 0.0                                | 46.0                                      | 8.8      | 0.0            | 42.3                                   |
| Cycle Q Clear(g_c), s  | 40.0           | 0.0                     | 32.2        | 38.8         | 0.0                           | 33.1         | 11.0                       | 0,0                                | 46.0                                      | 8.8      | 0.0            | 42.3                                   |
| Prop In Lane   | 1.00           | 14115151517151464.464.4 | 0.45        | 1.00         | albitiMLAANASSIGS             | 0.26         | 1.00                       | 965 AD 1745 TOP                    | 0.14                                      | 1.00     |                | 0.17                                   |
| Lane Grp Cap(c); veh/h   | 118            | 0                       | 603         | 128          | 0                             | 647          | 258                        | 0                                  | 776                                       | 213      | 0              | 734                                    |
| V/C Ratio(X)   | 0.71           | 0.00                    | 0.87        | 0.41         | 0.00                          | 0.88         | 1.16                       | 0.00                               | 1.17                                      | 0.99     | 0.00           | 0.98                                   |
| Avail Cap(c_a), veh/h  | 118            | 0                       | 603         | 128          | iii ii 0 ii                   | 647          | 258                        | 0                                  | 776                                       | 213      | - 0            | 734                                    |
| HCM Platoon Ratio  | 1.00           | 1.00                    | 1.00        | 1.00         | 1.00                          | 1.00         | 1.00                       | 1.00                               | 1.00                                      | 1.00     | 1.00           | 1.00                                   |
| Upstream Filter(I)   | 1.00           | 0.00                    | 1,00        | 1.00         | 0.00                          | 1.00         | 1.00                       | 0.00                               | 1.00                                      | 1.00     | 0.00           | 1.00                                   |
| Uniform Delay (d), s/veh   | 52.9           | 0.0                     | 32.5        | 50.5         | 0.0                           | 32.8         | 47.8                       | 0.0                                | 32.0                                      | 49.0     | 0.0            | 32.5                                   |
| Incr Delay (d2), s/veh<br>Initial Q Delay(d3),s/veh  | 18.4<br>0.0    | 0.0                     | 12.6        | 2,1          | 0.0                           | 13.7         | 106.1                      | 0.0                                | 88.1                                      | 57.8     | 0.0            | 28.0                                   |
| %ile BackOfQ(50%),veh/ln   | 0.0<br>3.1     | 0.0<br>0.0              | 0.0<br>16.8 | 0.0          | 0.0                           | 0.0          | 0.0                        | 0.0                                | 0.0                                       | 0.0      | 0.0            | 0.0                                    |
| LnGrp Delay(d),s/veh   | 71.3           | 0.0                     | 45.1        | 1.7          | 0.0                           | 18.7         | 15.4                       | 0,0                                | 42.5                                      | 9.8      | 0.0            | 27.0                                   |
| LnGrp LOS  | 71.3<br>E      | 0.0                     | 43.1<br>D   | 52.6<br>D    | 0.0                           | 46.5<br>D    | 153.9                      | 0.0                                | 120.1                                     | 106.8    | 0.0            | 60.5                                   |
| Approach Vol, veh/h  |                | 606                     | <b>.</b>    |              | 625                           | ט            |                            | 1203                               | FIE                                       | F        | 007            | THE                                    |
| Approach Delay, s/veh  |                | 48.7                    |             |              | 47.0                          |              |                            | 128.5                              |   |          | 927            | Submissi                               |
| Approach LOS   |                | D                       |             |              | D                             |              |                            | 120,0<br>F                         |   |          | 71.0           |  |
| A PART OF THE PART |                | _                       |             |              |                               |              | ***                        |                                    |   |          | E              |  |
| Timer  | 1              | 2                       | 3           | 4            | - 5                           | 6            | 7                          | - 8                                |   | 100      |                |  |
| Assigned Phs   | 1              | 2                       |             | 4            | 5                             | 6            |                            | 8                                  | COOR MAINT BE                             |          |                |  |
| Phs Duration (G+Y+Rc), s<br>Change Period (Y+Rc), s  | 14.0           | 51.0                    |             | 45.0         | 16.0                          | 49.0         |                            | 45.0                               | Millian Cit.                              |          |                |  |
| Max Green Setting (Gmax), s  | 5.0<br>9.0     | 5.0                     |             | 5.0          | 5.0                           | 5.0          |                            | 5.0                                | Kanananana.                               |          |                |  |
| Max Q Clear Time (g_c+l1), s   |                | 46.0<br>48.0            |             | 40.0<br>42.0 | 11.0<br>13.0                  | 44.0<br>44.3 |                            | 40.0                               |   |          |                |  |
| Green Ext Time (p_c), s  | 0.0            | 0.0                     |             | 42.0<br>0.0  | 0.0                           | 44.3<br>0.0  |                            | 40.8                               |   |          |                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
|  | Hara <b>Ma</b> | enda iyon               |             | W.Y.         | y v                           | U.U.         |                            | 0.0                                |   |          |                |  |
| Intersection Summary   |                |                         |             |              |                               |              |                            |                                    |   |          |                |  |
| HCM 2010 Ctrl Delay  |                |                         | 83.1        | Halika       |                               |              |                            |                                    |   |          | 1000 1000 1000 | in litais                              |
| HCM 2010 LOS   |                |                         | F           |              |                               |              |                            |                                    |   |          |                | 44.114.34.45.                          |

|                                       | *************************************** |                                       |   |  |   |  |
|---------------------------------------|---|---------------------------------------|---|--|---|--|
| ntersection                           |   |                                       | 1 P 1 P 1   |  |   |  |
| nt Delay, s/veh                       | 0.8                                     | i di istind                           |   |  |   |  |
|                                       | <b>Fa</b>                               |                                       | NBL NBT   |  | SBT SBR   |  |
| /lovement<br>/ol, veh/h               | EBL<br>Banda a gradu                    | EBR<br>27                             | 18 1123   |  | 813 14  |  |
| Conflicting Peds, #/hr                | 0                                       | 24<br>0                               | 0 0   |  | 0 0   |  |
| Sign Control                          | Stop                                    | Stop                                  | Free Free   |  | Free Free   |  |
| RT Channelized                        | -                                       | None                                  | - None  | 2650 ([1265] FESCORE 1222   1715 (1446 1141 1446 1446 1446 1446 1446 144   | - None  | AAATATAOO OO OO OO AAAAAAAAAAAAAAAA  |
| Storage Length                        | 0                                       |                                       |   |  |   |  |
| /eh in Median Storage,                | # 0                                     | · · · · · · · · · · · · · · · · · · · | - 0   |  | 0 -   |  |
| Grade, % ( )                          | -2 4                                    |                                       | 90 90   |  | 2 = 5<br>90 90  |  |
| Peak Hour Factor<br>Heavy Vehicles, % | 90<br>2                                 | 90<br>2                               | 90 90<br>2 2  |  | 90 90   |  |
| neavy venicies, 70<br>Avmt Flow       | 10                                      | 30                                    | 20 1248   |  | 903 16  |  |
|                                       |   |                                       |   |  |   |  |
| Major/Minor                           | Minor2                                  |                                       | Major1  |  | Major2  |  |
| Conflicting Flow All                  | 2199                                    | 911                                   | 919 0   |  | 07  |  |
| Stage 1                               | 911                                     |                                       | 1.3650N-10 <b>7</b> .746.643.744 <b>.7</b> 56.65<br>- | ENDIOGRAFIA ASCIONIA   |   | laidi depityi fortoitan makkaalaa Miilawa Daib   |
| Stage 2                               | 1288                                    |                                       | an conservation services                              |  |   |  |
| Critical Hdwy                         | 6.02                                    | 6.02                                  | 4.12 -  |  |   |  |
| Critical Hdwy Stg 1                   | 5.02                                    |                                       |   |  |   |  |
| Critical Hdwy Stg 2                   | 5.02                                    | -<br>3.318                            | 2.218   |  |   |  |
| follow-up Hdwy<br>Pot Cap-1 Maneuver  | 3.518<br>63                             | 350                                   | 743 -   |  |   |  |
| Stage 1                               | 434                                     |                                       |   | Here is the second of the seco |   | erge gesenellen er   |
| Stage 2                               | 299                                     |                                       |   | estas (a), Principi (A)  |   | , 1 TQ QQ (2015, 10, 17.65 - 2 19.65 - 12.198521 (8925-96294) (8945-964) (894-96-964)  |
| Platoon blocked, %                    |   |                                       | ######################################                |  |   |  |
| Mov Cap-1 Maneuver                    | 57                                      | 350                                   | 743 -   |  |   | ations in the second of the se |
| Mov Cap-2 Maneuver                    | 57                                      |                                       |   |  |   |  |
| Stage 1                               | 434<br>273                              |                                       |   |  |   |  |
| Stage 2                               | 213                                     |                                       |   |  |   |  |
| Approach                              | EB                                      |                                       | NB  |  | SB  |  |
| HCM Control Delay, s                  | 36.7                                    |                                       | 0.2   |  | 0   |  |
| TOM CONTROL DETAY, S                  | 30.7                                    |                                       |   |  |   |  |
| (- 1944 il distribution in 1944)      | .a.s                                    | (80k) - 54863613925                   | BEEST TERMINATUR BASE COLU                            |  | a tallur i i rasa is relazente i ser i serre i serre i serre i susc |  |
| vlinor Lane/Major Mvmt                | NBL N                                   | BTEBLn1 S                             | BT SBR  |  | and the second  |  |
| Capacity (veh/h)                      | 743                                     | - 153                                 |   |  |   |  |
| HCM Lane V/C Ratio                    | 0.027                                   | - 0.261                               |   |  |   |  |
| HCM Control Delay (s)                 | 10                                      | 0 36.7                                | -   |  | 200-201-12-201-12-12-12-12-12-12-12-12-12-12-12-12-12               | >  |
| HCM Lane LOS                          | A                                       | A E                                   |   |  |   |  |
| HCM 95th %tile Q(veh)                 | 0.1                                     | - 1                                   |   |  |   |  |

| Intersection Int Delay, s/veh            | 0.8                         |                           |   |  |                                       |  |   |  |
|--|-----------------------------|---------------------------|---|--|---------------------------------------|--|---|--|
|  |                             |                           |   |  |                                       |  |   |  |
| Movement .                               |                             | and the second of a party | EBR   |  | WBT                                   | NBL  | NBR   |  |
| Vol, veh/h<br>Conflicting Peds, #/hr     |                             | 546                       | 17  |  | 772                                   | 16   | 25  |  |
| Sign Control                             |                             | 0<br>Free                 | 0<br>Free                                   | 0<br>Free  | 0<br>Free                             | 0<br>Stop  | 0<br>Stop                                     |  |
| RT Channelized                           | 000251223774444444444477777 | >xoxoxoxox3xcrox          | None  | 1012)2111111429449464686866  | None                                  | -<br>-   | None  | annaguriguradsinistseselenis   |
| Storage Length                           | u                           |                           |   |  | 2 3                                   | i i i i i i i i i i i i i i i i i i i  |   |  |
| Veh in Median Storage,<br>Grade, %       | #                           | 0<br>0                    |   | -  | 0                                     |  | -<br>102466121426461                          |  |
| Peak Hour Factor                         |                             | 94                        | 94  | 94   | 94                                    | 92   | 92  |  |
| Heavy Vehicles, %                        |                             | 2                         | 2   | 2  | 2                                     | 2  | 2   |  |
| Mvmt Flow                                |                             | 581                       | 18  | 22   | 821                                   | 17   | 27  |  |
| Major/Minor                              |                             | Major1                    | eccenters (K                                | Major2   |                                       | Minor1   |   |  |
| Conflicting Flow All                     |                             | мајон<br>0                | 0   | - Wajurz<br>- 599  | 0                                     | 1456   | 590   | en de de de la                   |
| Stage 1                                  |                             | -                         | -   | -  | -<br>-                                | 590  | SCHOOLSENAMA<br>-                             |  |
| Stage 2                                  |                             |                           |   |  | . Historia                            | 866  |   | rijaj ir 1. japan j  |
| Critical Hdwy<br>Critical Hdwy Stort     |                             |                           |   | 4.12   | Libogionio                            | 6.42<br>5.42   | 6.22  |  |
| Critical Hdwy Stg 2                      |                             | -                         | -<br>-                                      | ######################################   | -<br>-                                | 5.42   | #318###################################       |  |
| Follow-up:Hdwy                           | 65 8396                     |                           |   | 2.218  |                                       | 3.518  | 3,318   |  |
| Pot Cap-1 Maneuver<br>Stage 1            |                             | -<br>                     | 1919 <u>-</u> 1917-1919.                    | 978  |                                       | 143<br>554   | 508   |  |
| Stage 2                                  | 188666 ****                 | -                         | -<br>-                                      | 46440000000000000000000000000000000000   | -                                     | 412  | -<br>-  | inini kunio sunasuntarukai k   |
| Platoon blocked, %                       |                             |                           |   |  |                                       |  |   |  |
| Mov Cap-1 Maneuver Mov Cap-2 Maneuver    |                             |                           | -<br>():::::::::::::::::::::::::::::::::::: | 978  | -                                     | 137<br>137   | 508   | Computation and section in section is seen in                        |
| Stage 1                                  |                             | -                         | -   | -  |                                       | 554  | 445974498594444446666666666666666666666666666 | id Addurestssen autoprofiteit i 1866;                                |
| Stage 2                                  |                             | . jurija <b>-</b> ju      |   |  |                                       | 1911 Burn 19395  |   |  |
| •  |                             |                           |   |  |                                       |  |   |  |
| Approach HCM Control Delay, s            |                             | EB<br>0                   |   | WB<br>0.2  |                                       | NB<br>22.8   |   |  |
| HCM LOS                                  |                             | U                         |   | 0.2  |                                       | 22.8<br>   |   |  |
| Anthropy (Chain Lann)                    |                             |                           |   |  |                                       | opposition de la company d |   | ueder ersilijamaen un namikisii                                      |
| Minor Lane/Major Mvmt                    | NBLn1                       | EBT                       | EBR WB                                      | L WBT  |                                       |  |   |  |
| Capacity (veh/h)                         | 247                         | 113463(373670,674744      | - 97  |  | in a state of the contract of the ci- | on and the state of | (12)x;**112701111595jojojo; 1500,14400001     |  |
| HCM Lane V/C Ratio HCM Control Delay (s) | 0.18<br>22.8                |                           | - 0,02<br>- 8.                              |  |                                       |  |   |  |
| HCM Lane LOS                             | 22.0<br>                    |                           |   | Contract to the second |                                       |  |   |  |
| HCM 95th %tile Q(veh)                    | 0.6                         | _                         | - 0.  | *:*********************  | m                                     | マロ・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・アン・   |   | niewszene i powieczo są intoronian orzenne padad latenia mieżli ją i |

|  |  |   |  | *************************************** | STANDARD STORY STANDARD STANDA |  |
|--|--|---|--|---|--|--|
| Intersection                                 |  |   |  |   |  |  |
| Int Delay, s/veh                             | 3.4  |   |  |   |  |  |
| Movement                                     | EBL EBT  |   | WBT WBR  | SBL                                     | SBR  |  |
| Vol, veh/h                                   | 0 9  |   | 4 29   | 26                                      | 0  |  |
| Conflicting Peds, #/hr                       | 0 0  |   | 0 0  | 0                                       | 0  | a persana nadia de namen e prima a manuar (anterna) e de la composició de la composició de la composició de la |
| Sign Control RT Channelized                  | Free Free  |   | Free Free None                                     | Stop                                    | Stop None  |  |
| Storage Length                               | - None   |   | - None   | 0                                       | IVOITE   |  |
| Veh in Median Storage,                       |  |   | 0 -  | 0                                       | -  | VV \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$   |
| Grade, %<br>Peak Hour Factor                 | 92 92  |   | 0   1  | 92                                      | 92   |  |
| Heavy Vehicles, %                            | 92 92<br>2 2   |   |  | 92<br>2                                 | 2  |  |
| Mvmt Flow                                    | 0 10   | <u> </u>  | 2 2 2<br>4 32                                      | 28                                      | 0  |  |
|  |  |   |  |   |  |  |
| Major/Minor                                  | Major1   | The third section of the section of | Major2   | Minor2                                  |  | garanda estilitza o martin maren bed   |
| Conflicting Flow All Stage 1                 | 36   |   |  | 30<br>20                                | 20   |  |
| Stage 2                                      |  |   |  | 20<br>10                                |  |  |
| Critical Hdwy                                | 4.12 -   |   |  | 6.42                                    | 6.22   |  |
| Critical Hdwy Stg 1<br>Critical Hdwy Stg 2   |  |   |  | 5.42<br>5.42                            |  | neinusuusankuuntuksi   |
| Follow-up Hdwy                               | 2.218  |   | 6234 <u>Jeog P</u> len                             | 3.518                                   | 3.318  |  |
| Pot Cap-1 Maneuver                           | 1575 -   |   |  | 984                                     | 1058   |  |
| Stage 1 Stage 2                              |  | e en dictional proprieta  |  | 1003<br>1013                            |  |  |
| Platoon blocked, %                           | alia isyet kickeniye kaza  |   |  |   |  |  |
| Mov Cap-1 Maneuver                           | 1575 -   | 5-11 (1-14-11-11-11-11-11-11-11-11-11-11-11-11  |  | 984                                     | 1058   | A 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| Mov Cap-2 Maneuver                           |  |   |  | 984<br>1003                             |  |  |
| Stage 1                                      |  |   |  | 1003                                    |  |  |
| innungananiketinganganganganan-              | enteria i de la companio de la comp |   | en seer vasti mijineles eseere eri zus ee ASSESSES | ######################################  | ezu . e c jez c b c u/u. p/ ** c li u k li li li d k li li li d k li li li li d k li li li li li li li li li l   | · (+0 + * * * * * * * * * * * * * * * * * *  |
| Approach                                     | EB   |   | WB   | SB                                      |  |  |
| HCM Control Delay, s                         | 0  |   | 0  | 8.8                                     |  | Listering (sende ur juddi) ("gráddað. úði sá. ar í betá filles st  |
| HCM LOS                                      |  |   |  | A                                       |  |  |
| \$42:00 1 00 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | icul icul  | MOT WAD COL-4   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,            |   |  |  |
| Minor Lane/Major Mymt<br>Capacity (veh/h)    | EBLEBT   | WBT WBR SBLn1 - 984   |  |   |  |  |
| HCM Lane V/C Ratio                           |  | 0.029   | ng ang gran  |   |  |  |
| HCM Control Delay (s)                        | 0 -  | 8.8   |  |   | Asiacusassons pronoc   |  |
| HCM Lane LOS<br>HCM 95th %tile Q(veh)        | , A 146 € 165<br>- O   | 0.1   |  |   |  |  |
| LION SOUL YOUR ON ACH)                       | 0 -  | 0.1   |  |   |  |  |

|  | ۶              | <b>→</b>    | •  | <b>√</b> | <b>—</b>      | *  | •                     | Ť              | <i>&gt;</i>                             | 7              | <b>+</b>     | <b>√</b>         |
|--|----------------|-------------|--|----------|---------------|--|-----------------------|----------------|---|----------------|--------------|------------------|
| Movement                                 | EBL            | EBT         | EBR  | WBL      | WBT           | WBR  | NBL                   | NBT            | NBR                                     | SBL            | SBT          | SBR              |
| Lane Configurations                      | <b>*</b>       | þ           |  | 4        | <b></b>       | COLUMN TANKEN TO THE TOTAL TO T | <b>\</b>              | <b></b>        | * | ሻ              | ß            | Zielkikinerer ir |
| Volume (veh/h)                           | 41             | 227         | 214  | 59       | 226           | 142  | 218                   | 699            | 83                                      | 135            | 695          | 62               |
| Number                                   | 7              | 4           | 14   | 3        | 8             | 18   | 5                     | 2              | 12                                      | 1              | 6            | 16               |
| Initial Q (Qb), veh                      | 0              | 0           | 0  | 0        | 0             | 0  | 0                     | 0              | 0                                       | 0              | 0            | 0                |
| Ped-Bike Adj(A_pbT)                      | 1.00           |             | 1.00   | 1.00     |               | 1.00   | 1.00                  |                | 1.00                                    | 1.00           | 2 00         | 1.00             |
| Parking Bus, Adj                         | 1.00           | 1.00        | 1.00   | 1.00     | 1.00          | 1.00   | 1.00                  | 1.00           | 1.00                                    | 1.00           | 1.00         | 1.00             |
| Adj Sat Flow, veh/h/ln                   | 1863<br>42     | 1788        | 1900   | 1863     | 1863          | 1900   | 1900                  | 1900           | 1938                                    | 1891           | 1891         | 1928             |
| Adj Flow Rate, veh/h<br>Adj No. of Lanes |                | 232<br>1    | 218  | 60       | 231           | 145  | 222                   | 713            | 85                                      | 138            | 709          | 63               |
| Adj No. of Laries<br>Peak Hour Factor    | 1<br>0.98      | 0.98        | 0<br>- 0.98  | 0.98     | 1<br>0.98     | 0<br>0.98  | 1<br>0,98             | 1<br>0.98      | 0<br>0.98                               | 0.98           | 1<br>0.98    | 0                |
| Percent Heavy Veh, %                     | u.90<br>2      | u.90        | 0.96   | U.90     | u.90          | ມ.ອວ<br>2  | u.96<br>2             | U.96<br>2      | u.90 ii                                 | u.96<br>2      | U.96<br>2    | 0.98<br>2        |
| Cap, veh/h                               | 214            | 280         | 263  | 141      | 2<br>353      | 222  | 258                   | 785            | 2<br>94                                 | 2<br>192       | 725          | 2<br>64          |
| Сар, vend<br>Arrive On Green             | 0.33           | 0.33        | 0.33   | 0.33     | 0.33          | 0.33   | 0.11                  | 765<br>0.47    | 0.47                                    | 0.06           | 0.42         | 0.42             |
| Sat Flow, veh/h                          | 1003           | 0.33<br>849 | 798  | 937      | 1071          | 0.33<br>673  | 1810                  | 1666           | 199                                     | 1801           | 1712         | 152              |
| Grp Volume(v), veh/h                     | 42             | 0           | 450  | 60       | 0             | 376  | 222                   | 0              | 798                                     | 138            | 0            | 772              |
| Grp Sat Flow(s), veh/h/ln                | 1003           | 0           | 1647   | 937      | 0             | 370<br>1744  | 1810                  | 0              | 1865                                    | 1801           | 0            | 1864             |
| Q Serve(g_s), s                          | 4.0            | 0.0         | 26.7   | 6.7      | 0.0           | 19.6   | 8.7                   | 0.0            | 42.0                                    | 2.7            | 0.0          | 43.3             |
| Cycle Q Clear(g_c) s                     | 23.5           | 0.0         | 26.7   | 33.5     | 0.0           | 19.6   | 8.7                   | 0.0            | 42.0                                    | 2.7            | 0.0          | 43.3             |
| Prop In Lane                             | 1.00           | 0.0         | 0.48   | 1.00     | 0,0           | 0.39   | 1.00                  | U,U            | 0.11                                    | 1.00           | U.U.         | 0.08             |
| Lane Grp Cap(c), veh/h                   | 214            | 0           | 543  | 141      | 0             | 575  | 258                   | 0              | 878                                     | 192            |              | 790              |
| V/C Ratio(X)                             | 0.20           | 0.00        | 0.83   | 0.43     | 0.00          | 0.65   | 0.86                  | 0.00           | 0.91                                    | 0.72           | 0.00         | 0.98             |
| Avail Cap(c_a), veh/h                    | 214            | 0.00        | 543  | 141      | 0.00          | 575  | 323                   | 0.00           | 878                                     | 257            | 0.00         | 790              |
| HCM Platoon Ratio                        | 1.00           | 1.00        | 1.00   | 1.00     | 1.00          | 1.00   | 1.00                  | 1.00           | 1.00                                    | 1.00           | 1.00         | 1.00             |
| Jpstream Filter(I)                       | 1.00           | 0.00        | 1.00   | 1.00     | 0.00          | 1.00   | 1.00                  | 0.00           | 1.00                                    | 1.00           | 0.00         | 1.00             |
| Jniform Delay (d), s/veh                 | 40.5           | 0.0         | 32.8   | 48.2     | 0.0           | 30.4   | 45.1                  | 0.0            | 26.0                                    | 47.3           | 0.0          | 30.1             |
| Incr Delay (d2), s/veh                   | 0.4            | 0.0         | 10.3   | 2.0      | 0.0           | 2.7  | 17.1                  | 0.0            | 14.9                                    | 6.3            | 0.0          | 26.9             |
| Initial Q Delay(d3),s/veh                | 0.0            | 0.0         | 0.0  | 0.0      | 0.0           | 0.0  | 0.0                   | 0.0            | 0.0                                     | 0.0            | 0.0          | 0.0              |
| %ile BackOfQ(50%),veh/ln                 | 1.1            | 0.0         | 13.7   | 1.8      | 0.0           | 9.8  | 7.6                   | 0,0            | 25.1                                    | 4.2            | 0.0          | 28.0             |
| LnGrp Delay(d),s/veh                     | 40.9           | 0.0         | 43.2   | 50.3     | 0.0           | 33.1   | 62.2                  | 0.0            | 40.9                                    | 53.6           | 0.0          | 57.0             |
| LnGrp LOS                                | D              |             | D  | D        |               | C  | E                     |                | D                                       | D              |              | ###E             |
| Approach Vol, veh/h                      |                | 492         |  |          | 436           |  |                       | 1020           |   |                | 910          |                  |
| Approach Delay, s/veh 👚 🥛                |                | 43,0        | Marian de la composición dela composición de la composición dela composición dela composición dela composición de la composición dela c |          | 35.4          |  | enelene               | 45.5           |   |                | 56.5         |                  |
| Approach LOS                             |                | D           |  |          | D             |  |                       | D              |   |                | Е            |                  |
| Timer                                    | 1              | 2           | 3  | 4        | 5             | 6  | 7                     | Я              |   |                |              |                  |
| Assigned Phs                             | 1              | 2           |  | 4        | 5             | 6  |                       | 8              |   |                |              |                  |
| Phs Duration (G+Y+Rc), s                 | 11.2           | 55.0        |  | 40,0     | 16.2          | 50.0   |                       | 40:0           | dioren estas                            |                |              |                  |
| Change Period (Y+Rc), s                  | 5.0            | 5.0         |  | 5.0      | 5.0           | 5.0  |                       | 5.0            |   |                |              |                  |
| Max Green Setting (Gmax), s              |                | 50.0        |  | 35.0     | 15.0          | 45.0   |                       | 35.0           |   |                |              |                  |
| Max Q Clear Time (g_c+l1), s             |                | 44.0        | todinali) edibal   | 28.7     | 10.7          | 45.3   | mhumahiid             | 35.5           |   | F. 1960 (1960) |              |                  |
| Green Ext Time (p_c), s                  | 0,5            | 2.7         |  | 2.9      | 0.4           | 0.0  |                       | 0.0            |   |                |              |                  |
|  | ν,γ,           |             |  | -17      | Y.7           |  |                       | V.V.           |   |                |              |                  |
| Intersection Summary                     | n innere samue |             | THE REPORT OF THE  |          | en forfattera | o de la compania de  | PORTE THE PROPERTY OF | minima en esta | ourienikoa en essa                      | n ananyan a sa | Minimizate e | Bothingies       |
| HCM 2010 Ctrl Delay                      |                |             | 47.1   |          |               |  | oprini ili            |                |   |                |              |                  |
| HCM 2010 LOS                             |                |             | D  |          |               |  |                       |                |   |                |              |                  |

|                              |                      | -                                       |  |  | :                                      |  |
|------------------------------|----------------------|---|--|--|--|--|
| Intersection                 |                      |   |  |  |  |  |
| Int Delay, s/veh             | 0                    | Sda Lann nivedrna i stan en en novembre |  | () of a bases on a series of the series of t |  |  |
|                              |                      |   |  |  |  |  |
| Movement                     | EBL                  | EBR                                     | NBL NBT  |  | SBT SBR                                |  |
| Vol. ven/h                   | 0                    | 1                                       | 2 1000   | re de materi   | 968 0                                  |  |
| Conflicting Peds, #/hr       |                      | 0                                       | 0 0  | \$775\$7.55\$7\$   | 0 0                                    |  |
| Sign Control  RT Channelized | Stop                 | Stop                                    | Free Free                                      | nd de anna an a  | Free Free                              |  |
| Storage Length               | 0                    | None                                    | - None   |  | - None                                 |  |
| Veh in Median Storage, #     | 0                    | _                                       | - O  |  | n _                                    |  |
| Grade, %                     | $\tilde{\mathbf{z}}$ |   | - <u>2</u>                                     |  | 0<br>2                                 |  |
| Peak Hour Factor             | 95                   | 95                                      | 95 95  | 34(1612-941)(1/2000/946(1976)91194 <b>214</b> 0441   | 95 95                                  | re area de la company de la  |
| Heavy Vehicles, %            | 2                    | 2                                       | 2 2 2  |  | 2 2                                    |  |
| Mvmt Flow                    | 0                    | 1<br>Enteropetador ocues                | 2 1053   | •<br>Boothermannerengeneralen  | 1019 0                                 |  |
|                              |                      |   |  |  |  |  |
| Major/Minor                  | Minor2               | No established                          | Major1   | Ma   | ijor2                                  |  |
| Conflicting Flow All Stage 1 | 2076<br>1019         | 1019                                    | 1019 0   |  |  |  |
| Stage 2                      | 1019                 | -                                       |  |  | -<br>Nabrikane kapagana                |  |
| Critical Hdwy                | 6.02                 | 6.02                                    | 4.12 -   | uuda kulisi-ahki adda kaleesta kaleesi (s  | :::::::::::::::::::::::::::::::::::::: |  |
| Critical Hdwy Stg 1          | 5.02                 |   | (6) (1) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6 | and contract of the second   |  |  |
| Critical Hdwy Stg 2          | 5.02                 | TAXOGG G GARACETT AN GEORGE EING        | -  | ALAMA A ANTA ANTA ANTA ANTA ANTA ANTA ANTA   |  |  |
| Follow-up Hdwy               | 3.518                | 3.318                                   | 2.218  |  |  | the compared the   |
| Pot Cap-1 Maneuver           | 74<br>390            | 304                                     | 681 -  |  | Angaintáightean éarnasanasan           |  |
| Stage 2                      | 376                  | _                                       |  |  |  |  |
| Platoon blocked, %           |                      |   |  |  |  |  |
| Mov Cap-1 Maneuver           | 73                   | 304                                     | 681 -  | 31,000   |  | 3147414-97474-071-1-00-1-0944199-1-48-1-58-1-58-1-58-1-68-1-68-1-68-1-68-1-6   |
| Moy Cap-2 Maneuver           | 73                   |   |  |  |  |  |
| Stage 1<br>Stage 2           | 390<br>373           | -<br>                                   |  |  |  |  |
|                              | O.O.                 |   |  |  |  |  |
| Approach                     | EB .                 |   | NB   |  | gn.                                    |  |
| HCM Control Delay, s         | 16.9                 |   | 0<br>0   |  | SB 0                                   |  |
| HCM LOS                      | 10.5                 |   |  |  | U                                      |  |
| · ·                          | P99499999999999999   |   |  |  |  | urenipuleoniussiosiassuy   |
| Minor Lane/Major Mymt        | NBL NB               | TEBLn1 St                               | ST SBR   |  |  |  |
| Capacity (veh/h)             | 681                  | - 304                                   |  |  |  |  |
| HCM Lane V/C Ratio           | 0.003                | - 0.003                                 |  |  |  |  |
| HCM Control Delay (s)        |                      | 0 16.9                                  |  |  |  | AND THE PERSON OF THE PROPERTY OF THE PERSON |
| HCM Lane LOS                 |                      | A E F C III II                          | Angeter in its                                 |  |  |  |
| HCM 95th %tile Q(veh)        | 0                    | - 0                                     | ·  |  | •                                      |  |

|                             | •                                       | -                | 7                    | •              | +                | 1                                      | <b>~</b>                            | †                    | <i>&gt;</i>                             | -   | <b></b>    | 4           |
|-----------------------------|---|------------------|----------------------|----------------|------------------|--|-------------------------------------|----------------------|---|---|------------|-------------|
| Movement                    | EBL                                     | EBT              | EBR                  | WBL            | WBT              | WBR                                    | NBL                                 | NBT                  | NBR                                     | SBL   | SBT        | SBF         |
| Lane Configurations         | *************************************** | <b></b>          |                      | <b>`</b>       | <b>þ</b>         | evenue zoes                            | <b>ነ</b> ኘ                          | ₽                    |   | ሻ   | ֆ          |             |
| Volume (veh/h)              | 48                                      | 232              | 214                  | 61             | 230              | 142                                    | 218                                 | 700                  | 83                                      | 135   | 697        | 69          |
| Number                      | 7                                       | 4                | 14                   | 3              | 8                | 18                                     | 5                                   | 2                    | 12                                      | 1   | 6          | 10          |
| nitial Q (Qb), veh          | 0                                       | 0                | 0                    | 0              | 0                | 0                                      | 0                                   | 0                    | 0                                       | 0   | 0          |             |
| Ped-Bike Adj(A_pbT)         | 1.00                                    | **************** | 1.00                 | 1.00           |                  | 1.00                                   | 1.00                                | ****************     | 1.00                                    | 1.00  |            | 1.0         |
| Parking Bus, Adj            | 1.00                                    | 1.00             | 1.00                 | 1.00           | 1.00             | 1.00                                   | 1.00                                | 1.00                 | 1.00                                    | 1.00  | 1.00       | 1.0         |
| Adj Sat Flow, veh/h/ln      | 1863                                    | 1788             | 1900                 | 1863           | 1863             | 1900                                   | 1900                                | 1900                 | 1938                                    | 1891  | 1891       | 192         |
| Adj Flow Rate, veh/h        | 49                                      | 237              | 218                  | 62             | 235              | 145                                    | 222                                 | 714                  | 85                                      | 138   | 711        | 7           |
| Adj No. of Lanes            | 1                                       | 1                | 0                    | 1              | 1                | 0                                      | 1                                   | 1                    | 0                                       | 1   | 1          |             |
| Peak Hour Factor            | 0.98                                    | 0.98             | 0.98                 | 0.98           | 0.98             | 0.98                                   | 0.98                                | 0.98                 | 0.98                                    | 0.98  | 0.98       | 0.9         |
| Percent Heavy Veh, %        | · <b>2</b>                              | 2                | 2                    | 2              | 2                | 2                                      | 2                                   | 2                    | 2                                       | 2   | 2          |             |
| Cap, veh/h                  | 211                                     | 283              | 260                  | 137            | 356              | 220                                    | 258                                 | 785                  | 93                                      | 191   | 718        | 7           |
| Arrive On Green             | 0.33                                    | 0.33             | 0.33                 | 0.33           | 0.33             | 0.33                                   | 0.11                                | 0.47                 | 0.47                                    | 0.06  | 0.42       | 0.4         |
| Sat Flow, veh/h             | 999                                     | 859              | 790                  | 932            | 1079             | 666                                    | 1810                                | 1667                 | 198                                     | 1801  | 1694       | 16          |
| Grp Volume(v), veh/h        | 49                                      | 0                | 455                  | 62             | 0                | 380                                    | 222                                 | 0                    | 799                                     | 138   | 0          | 78          |
| Grp Sat Flow(s),veh/h/ln    | 999                                     | 0                | 1649                 | 932            | 0                | 1745                                   | 1810                                | 0                    | 1865                                    | 1801  | 0          | 186         |
| Q Serve(g_s), s             | 4.7                                     | 0.0              | 27.1                 | 7.0            | 0.0              | 19.8                                   | 8.7                                 | 0.0                  | 42.1                                    | 2.8   | 0.0        | 44.         |
| Cycle Q Clear(g_c), s       | 24,5                                    | 0.0              | 27.1                 | 34.1           | 0.0              | 19.8                                   | 8.7                                 | 0.0                  | 42.1                                    | 2.8   | 0.0        | 44.         |
| Prop In Lane                | 1.00                                    |                  | 0.48                 | 1.00           |                  | 0.38                                   | 1.00                                | , .,,                | 0.11                                    | 1.00  |            | 0.0         |
| _ane Grp Cap(c), veh/h      | 211                                     | 0                | 544                  | 137            | 0                | 575                                    | 258                                 | 0                    | 878                                     | 191   | 0          | 78          |
| V/C Ratio(X)                | 0.23                                    | 0.00             | 0.84                 | 0.45           | 0.00             | 0.66                                   | 0.86                                | 0.00                 | 0.91                                    | 0.72  | 0.00       | 0.9         |
| Avail Cap(c_a), veh/h       | 211                                     | 0                | 544                  | 137            | 0                | 575                                    | 323                                 | 0                    | 878                                     | 256   | 0          | 78          |
| HCM Platoon Ratio           | 1.00                                    | 1.00             | 1.00                 | 1.00           | 1.00             | 1.00                                   | 1.00                                | 1.00                 | 1.00                                    | 1.00  | 1.00       | 1.0         |
| Jpstream Filter(I)          | 1.00                                    | 0.00             | 1.00                 | 1.00           | 0.00             | 1.00                                   | 1.00                                | .0.00                | 1.00                                    | 1.00  | 0.00       | 1.0         |
| Ĵniform Delay (d), s/veh    | 41.0                                    | 0.0              | 32.9                 | 48.7           | 0.0              | 30.5                                   | 45.1                                | 0.0                  | 26.0                                    | 47.3  | 0.0        | 30.         |
| ncr Delay (d2), s/veh       | 0.6                                     | 0.0              | 11.0                 | 2.3            | 0.0              | 2.8                                    | 17.1                                | 0.0                  | 15.1                                    | 6.4   | 0.0        | 29.         |
| nitial Q Delay(d3),s/veh    | 0.0                                     | 0.0              | 0.0                  | 0.0            | 0.0              | 0.0                                    | 0.0                                 | 0.0                  | 0.0                                     | 0.0   | 0.0        | 0.          |
| %ile BackOfQ(50%),veh/ln    | 1,3                                     | 0.0              | 13.9                 | 1.9            | 0.0              | 9.9                                    | 7.6                                 | 0.0                  | 25.2                                    | 4.3   | 0.0        | 29,         |
| _nGrp Delay(d),s/veh        | 41.5                                    | 0.0              | 44.0                 | 51.1           | 0.0              | 33.3                                   | 62.2                                | 0.0                  | 41.1                                    | 53.8  | 0.0        | 60.         |
| inGrp LOS                   | D                                       |                  | D                    | D              |                  | c                                      | E                                   |                      | D I                                     | D   |            |             |
| Approach Vol, veh/h         |   | 504              |                      |                | 442              |  |                                     | 1021                 |   |   | 919        |             |
| Approach Delay, s/veh       |   | 43.7             |                      |                | 35.8             |  |                                     | 45.7                 |   |   | 59.1       |             |
| Approach LOS                | aņanarnamas                             | D                | *121818CH218GH221111 |                | D                |  | Militar and description of the same | · D                  |   |   | Ε          | *********** |
| imer .                      | 1                                       | 2                | 3                    | 4              | 5                | 6                                      | 7                                   | . 8                  |   |   |            |             |
| Assigned Phs                | 1                                       | 2                |                      | 4              | 5                | 6                                      |                                     | 8                    |   |   |            |             |
| Phs Duration (G+Y+Rc), s ⊪  | 11.2                                    | 55.0             |                      | 40.0           | 16.2             | 50.0                                   |                                     | 40.0                 |   |   |            |             |
| Change Period (Y+Rc), s     | 5.0                                     | 5.0              |                      | 5.0            | 5.0              | 5.0                                    |                                     | 5.0                  | *************************************** |   |            | ovanne?     |
| Max Green Setting (Gmax), s |   | 50.0             |                      | 35.0           | 15.0             | 45.0                                   |                                     | 35.0                 |   |   |            |             |
| Max Q Clear Time (g_c+l1),  |   | 44.1             |                      | 29.1           | 10.7             | 46.2                                   |                                     | 36.1                 | .104814381181333381438                  | 3 44 4 5 400 00 00 00 00 00 00 00 00 00 00 00 | waupmaanas |             |
| Green Ext Time (p_c), s     | 0.5                                     | 2.6              |                      | 2.8            | 0.4              | 0.0                                    |                                     | 0.0                  |   |   |            |             |
|                             |   |                  |                      |                |                  | ************************************** |                                     |                      |   |   |            |             |
| ntersection Summary         |   |                  |                      | assi Maranoida | CONTRACTOR AND A | Marcol Victoria                        | an and an all and                   | ENTER ENTER STANFALL | THE STATE OF THE STATE OF               | rayera Alexandra                              |            |             |
| HCM 2010 Ctrl Delay         |   |                  | 48.1                 |                |                  |  |                                     |                      |   |   |            |             |
| ICM 2010 LOS                |   |                  | D                    |                |                  |  |                                     |                      |   |   |            |             |

| Intersection                           | 0.6                                   |                        | -   | A Company of the Comp |
|--|---------------------------------------|------------------------|---|--|
| Int Delay, s/veh                       | U.6                                   |                        |   |  |
| ······································ |                                       |                        |   |  |
| Movement                               | EBL .                                 | EBR 17                 | NBL NBT   | SBT SBR  |
| Vol, veh/h Conflicting Peds, #/hr      | 0                                     | 0                      | 0 0   | 0  0   |
| Sign Control                           | Stop                                  | Stop                   | Free Free   | Free Free  |
| RT Channelized                         | • • • • • • • • • • • • • • • • • • • | None                   | - None  | - None   |
| Storage Length                         | 0                                     |                        | enteriori de la compositione de la<br>La compositione de la composition |  |
| Veh in Median Storage,                 | # 0                                   | _<br>aragongoekhtustak | - 0<br>-2   | 0 -<br>2   |
| Grade, % Peak Hour Factor              | -2<br>95                              | 95                     | 95 95   | 95 95  |
| Heavy Vehicles, %                      | 2                                     | 2                      | 2 2   |  |
| Mvmt Flow                              | 9                                     | 18                     | 18 1044   | иничные се од од висовинителности видинество во од   |
| i kandaladi                            |                                       |                        |   |  |
| Major/Minor                            | Minor2                                |                        | Major1  | Major2   |
| Conflicting Flow All                   | 2096                                  | 1016                   | 1022 0  |  |
| Stage 1                                | 1016                                  | -                      |   | Laboramental distribution of the second state  |
| Stage 2                                | 1080                                  |                        |   |  |
| Critical Hdwy<br>Critical Hdwy Stg 1   | 6.02<br>5.02                          | 6.02                   | 4.12 -  |  |
| Critical Hdwy Stg 2                    | 5.02                                  | -                      |   |  |
| Follow-up Hdwy                         | 3.518                                 | 3,318                  | 2.218 -   |  |
| Pot Cap-1 Maneuver                     | 72                                    | 306                    | 679 -   |  |
| Stage 1                                | 391                                   |                        |   |  |
| Stage 2<br>Platoon blocked, %          | 367                                   | -                      |   |  |
| Mov Cap-1 Maneuver                     | 67                                    | 306                    | 679 -   |  |
| Mov Cap-2 Maneuver                     | 67                                    |                        |   |  |
| Stage 1                                | 391                                   | -                      | = -<br>ibasin baliotali baldachindibbi:   | шими жана донивично к ста т течне объемность на становый доние. В поставляющий доние в поставить в поставитель<br>В поставительной донивительной в поставительной доние.   |
| Stage 2                                | 344                                   |                        | olidahedir Försteri-A   |  |
|  |                                       |                        |   |  |
| Approach                               | EB                                    |                        | NB  | SB with the second of the SB with the second of the second |
| HCM Control Delay, s                   | 37.7                                  |                        | 0.2   | O  |
| HCM LOS                                | matikana Espain                       |                        |   |  |
|  |                                       |                        |   |  |
| Minor Lane/Major Mymt                  |                                       | BTEBLn1 S              | BT SBR  |  |
| Capacity (veh/h) HCM Lane V/C Ratio    | 679<br>0.026                          | - 137<br>- 0.2         |   |  |
| HCM Control Delay (s)                  | 10.4                                  | 0.2<br>0 37.7          |   | DE BORTO PROPRIO DE ACOMENCIA EN PROPERTADO DE PORTE DE PORTE DE COMENCIA DE ACOMENSA DE ACOMENSA DE LA COMENCA  |
| HCM Control Delay (s)<br>HCM Lane LOS  | B                                     | A                      |   |  |
| HCM 95th %tile Q(veh)                  | 0.1                                   | - 0.7                  | eren signado astar Gunina (EU) substituto<br>-  | oden in in 1987 e og het på til mint trange en konny prinseren karenden karenden fra blekkriben i eksketen i s<br>Karenden i skalt skriben i skriben i skriben skriben skriben karenden skriben i skriben i skriben i skriben i s  |

| ntersection<br>nt Delay, s/veh 0.6       | 15 July 1985 1985 1985 1985  |                   |  |  |   |
|--|--|-------------------|--|--|---|
| nt Delay, s/veh 0.6                      |  |                   |  |  |   |
| Aovement                                 | EBT EBR  | WBL WBT           | NBL  | NBR  |   |
| /ol, veh/h                               | 475 13   | 16 501            | 12   | 19   |   |
| Conflicting Peds, #/hr                   | 0 Ó  | 0 0               | 0  | 0  |   |
| ign Control                              | Free Free  | Free Free         | Stop   | Stop   |   |
| T Channelized                            | - None   | - None            | -<br>  | None   |   |
| torage Length<br>eh in Median Storage, # | 0 -  | - 0               | 0  | #8; ************************************   |   |
| rade, %                                  | 0 -<br>0 - 2   | 5 0               | 0  |  |   |
| eak Hour Factor                          | 98 98  | 98 98             | 92   | 92   | Sala Algumento de Como  |
| eavy Vehicles, %                         | 485 13   | 16 511            | 13   | 2<br>21  |   |
| ivmt Flow                                | 460 13   | 10 311            |  | Z I  |   |
|  |  | . Maior2          | Minor1   | Has Canada C | 16486444444444444464696506  |
| fajor/Minor<br>Conflicting Flow All      | Majort   | Wajutz<br>498 4 0 | 1035   | 491  |   |
| Stage 1                                  |  | - <b>-</b>        | 491  | -  | haisdarpenn spensozzamen en errerun   |
| Stage 2                                  |  |                   | 544  |  |   |
| ritical Hdwy                             |  | 4.12 -            | 6.42<br>5.42                                   | 6.22   |   |
| ritical Hdwy Stg 1<br>ritical Hdwy Stg 2 |  |                   | 5.42   | -  |   |
| ollow-up Hdwy                            |  | 2.218 -           | 3.518  | 3.318  |   |
| ot Cap-1 Maneuver                        |  | 1066 -            | 257  | 578  |   |
| Stage 1404                               |  |                   | 615 6<br>582                                   |  |   |
| Stage 2<br>latoon blocked, %             |  |                   | 302  |  |   |
| lov Cap-1 Maneuver                       | — ————————————————————————————————————   | 1066 -            | 252  | 578  | a il i pris sesso di citari de danda se preca un talbata il in interfesso scrit |
| lov Cap-2 Maneuver                       |  |                   | 252  |  |   |
| Stage 1                                  |  |                   | 615<br>570                                     | -<br>  |   |
| Stage 2 is stage for the stage           | MARINA MARINA DE SENTIDO DE LA PRESENTACION PER LA COMPANSA DE LA COMPANSA DE LA COMPANSA DE LA COMPANSA DE LA |                   |  |  | Barillo den Grandananan Alla  |
| pproach                                  | EB   | WB                | NB   |  |   |
| ICM Control Delay, s                     | 0  | 0.3               | 15.2   |  |   |
| ICM LOS                                  |  |                   | Ċ  |  |   |
|  |  |                   |  |  |   |
| linor Lane/Major Mvmt 💎                  | NBLm1 EBT EBR W  | SL WBT            |  |  |   |
| Capacity (veh/h)                         | 385 100  |                   | ssurearranterenareagonado                      |  | to Chal Commentation and there is   |
| ICM Lane V/C Ratio                       | 0.088 0.0  |                   |  |  |   |
| ICM Control Delay (s)<br>ICM Lane LOS    |  | .4 0<br>A A       |  |  |   |
| ICM 95th %tile Q(veh)                    | 0.3  | 7.54              | etan in en |  |   |

| Intersection<br>Int Delay, s/veh           | 4<br>4   |  |                       | iochietyentoe                                 | nacorano e mercaso  |                     |                                    |
|--|--|--|-----------------------|---|---|---------------------|------------------------------------|
| Movement                                   | EBL E  | 100 maria (100 maria) (150 maria)<br>1           |                       | WBR   | SBL   | SBR                 |                                    |
| Vol. ven/h<br>Conflicting Peds, #/hr       | 0<br>0   | 1<br>0   | 2<br>0                | 27<br>0                                       | 25<br>0   | 0<br>0              |                                    |
| Sign Control  RT Channelized               | Free Fre<br>- Nor  | \$41 1223421212124444545454222323454545654551456 | Free -                | Free<br>None                                  | Stop<br>-   | Stop<br>None        |                                    |
| Storage Length<br>Veh in Median Storage, # |  | 78.44.54.64.60<br>O                              | 0                     | -<br>-  | <b>0</b><br>0   |                     |                                    |
| Grade, % Peak Hour Factor                  | 92 9   | 0  | 92                    | 92  | 0<br>92   | 92                  |                                    |
| Heavy Vehicles, %<br>Mvmt Flow             | 2<br>0   | 2<br>1   | 2                     | 29<br>29                                      | 2<br>27   | 2 2 0 0             |                                    |
|  |  |  |                       |   |   |                     |                                    |
| Major/Minor<br>Conflicting Flow All        | Major1<br>32   | 0  | Major2                | 0   | Minor2<br>18  | 17                  |                                    |
| Stage 1                                    | Nggarin  |  |                       | -<br>11-11-14-14-14-14-14-14-14-14-14-14-14-1 | 17<br>1   |                     |                                    |
| Critical Hdwy<br>Critical Hdwy Stg 1       | 4.12   |  |                       |   | 6.42<br>5.42  | 6.22                |                                    |
| Critical Hdwy Stg 2<br>Follow-up Hdwy      | 2.218  |  |                       |   | 5.42<br>3.518   | 3.318               |                                    |
| Pot Cap-1 Maneuver<br>Stage 1              | 1580   | -<br>- 3 % 3 % 6 %                               |                       | -   | 1000<br>1006  | 1062                |                                    |
| Stage 2<br>Platoon blocked, %              | . (18.6-41 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 18.64 - 1 |  |                       | -<br>   | 1022  |                     |                                    |
| Mov Cap-1 Maneuver Mov Cap-2 Maneuver      | 1580   | -  |                       | -   | 1000<br>1000  | 1062                |                                    |
| Stage 1                                    |  | -<br>Dispurierum                                 |                       | -<br>-  | 1006<br>1022  |                     |                                    |
| 19 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | .commen stream()[gr  | rikiratis telüüdüsse syysteti (2) (1) (1)        | uraniusasiensieniinii | o-eriskinististist                            | >+4 4EM   14 2/19   4 4/6/6   1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | mateur prosentation | A STANTANT STEEL STANTANT STANTANT |
| Approach HCM Control Delay, s              | EB<br>0  |  | <b>WB</b><br>0        |   | SB<br>8.7   |                     |                                    |
| HCM LOS                                    |  |  |                       |   | Α   |                     |                                    |
| Minor Lane/Major Mymt Capacity (veh/h)     | EBL EB   | WBT WBR  | SBLn1<br>1000         |   |   |                     |                                    |
| HCM Lane V/G Ratio HCM Control Delay (s)   |  |  | 0.027                 |   |   |                     |                                    |
| HCM Lane LOS                               | 0<br>A   |  | 8.7<br>A              |   |   |                     |                                    |
| HCM 95th %tile Q(veh)                      | 0  | <del>-</del>                                     | 0.1                   |   |   |                     |                                    |



December 17, 2015

Ref: 41847.44

Mr. John Ewasutyn, Chairman Town of Newburgh Planning Board 308 Gardnertown Road Newburgh, New York 12550

Re: Response to Technical Review Comments CVS/pharmacy Section 60, Block 3, Lot 5.2

Dear Chairman Ewasutyn,

VHB is pleased to provide the following response to review comments that have been received from McGoey, Hauser and Edsall Consulting Engineers, D.P.C., dated November 30, 2015.

Comment 1:

In response to our previous comment identifying a City of Newburgh Flow Acceptance letter the applicants representative has stated that they will provide the narrative and hydraulic loading information prior to the projects building permit submission. Please be advised that the Planning Board based on an agreement with the City of Newburgh cannot take any final approvals of a project until the City of Newburgh Flow Acceptance letter has been received. Flow Acceptance letter is Planning Board not Building Permit submission.

Response:

Understood. Flow Acceptance Letter request was sent to Town Engineer Jim Osborne on December 9, 2015 along with all other required information for the Flow Acceptance Letter.

Comment 2:

Mike Donnelly's comments regarding the lease and access to the private drive to the rear of the parcel should be received. The Applicants response is that they will accept the condition of approval that requires said easement be recorded. Mike Donnelly's comments regarding deferral of this as a condition of approval should be received as significant traffic volumes could utilize the rear access.

Response:

Noted.

100 Great Meadow Road

Engineers | Scientists | Planners | Designers

Wethersfield, Connecticut 06109

**P** 860,807,4300

F 860.372.4570

Mr. John Ewasutyn, Chairman Ref: 41847.44 December 17, 2015 Page 2



Comment 3:

In response to our previous Comment #7 regarding soil permeability for infiltration practices the Applicants response states that laboratory analysis was performed to determine infiltration rates. In accordance with Appendix D. Laboratory Testing (a) "laboratory analysis can be utilized as soil for classification and textural analysis as can visual inspection. The use of laboratory testing to establish infiltration rates is prohibited."

Response:

Our prior response, dated November 23, 2015, was intended to say that the soils were submitted for laboratory analysis for grain size distribution only. VHB has reached out directly to Ransom, the geotechnical engineer, who has confirmed the following statement (which is also attached to this letter):

Ransom performed field testing in Boring B111 in accordance with the NY State SW Management Design Manual (Appendix D, infiltration tests through a borehole). The test depth was 6 feet (bottom of casing), and the infiltration rate was 2.5 in./hour, as reported. We correlated the soils at the test depth across the site, which were generally consistent, and used the grain-size distribution curves from other test borings to determine the USDA designation. Ransom did not use a laboratory test to determine the soil infiltration rate.

Comment 4:

The previous Comment #9 should be addressed by placing a note on the plans stating that all retaining walls in excess of 4 feet in height will be submitted to the Code Enforcement Officer.

Response:

Note stating "Retaining Walls in excess of 4 ft. in height are to be submitted to the Town of Newburgh Code Enforcement Officer" has been added to the Grading & Drainage Plan, Sheet C-3.

Comment 5:

The Town of Newburgh Water and Sewer Notes, copies attached, should be added to the plans. It is noted that the plans have been revised to copy sections of the Town code and can remain with the addition of the attached notes.

Response:

Town of Newburgh Water and Sewer notes have been added to planset.

Comment 6:

The Planning Board should review the rendering depicting the retaining wall with multiple colors.

Response:

The Planning Board reviewed the rendering depicting the retaining wall during its December 3<sup>rd</sup>, 2015 Meeting.

Comment 7:

The project will require a Stormwater Maintenance agreement to be executed with the Town of Newburgh.

Mr. John Ewasutyn, Chairman Ref: 41847.44 December 17, 2015 Page 3



Response:

Understood.

Comment 8:

Security and Inspection for Stormwater improvements and landscaping will be required

per Town Code.

Response:

Understood. Please note that inspections for the stormwater improvements are

within the Stormwater Management Report.

We trust you will find these responses satisfactory. If you wish for additional information, please contact me at your earliest convenience.

Sincerely,

Patrick N. O'Leary, P.E.

Principal poleary@vhb.com

From:

Kenneth W. Milender <kenneth.milender@ransomenv.com>

Sent:

Thursday, December 03, 2015 9:30 AM

To:

Grocki, Mark

Subject:

RE: Newburgh, NY CVS [Filed 14 Dec 2015 16:22]

Follow Up Flag: Flag Status:

Follow up Flagged

Hi Mark:

I took a look back at our project geotechnical report.

Ransom performed field testing in Boring B111 in accordance with the NY State SW Management Design Manual (Appendix D, infiltration tests through a borehole). The test depth was 6 feet (bottom of casing), and the infiltration rate was 2.5 in./hour, as reported. We correlated the soils at the test depth across the site, which were generally consistent, and used the grain-size distribution curves from other test borings to determine the USDA designation. Ransom did not use a laboratory test to determine the soil infiltration rate.

Hope that helps.

Ken M.



Project View

DRAWN BY: KLP PROJECT NO: ---



VIEW LOOKING SOUTH FROM RT 52 AT DRIVEWAY

Project View

b a

#### PROJECT DIRECTORY

OWNER ROUTE 52 NEWBURGH, LLC 788 SHREWSBURY AVENUE TINTON FALLS, NJ 07724 (201) 489-1177 CONTACT: YVONNE SUN DEVELOPER T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD, SUITE 101 LINCOLN, RHODE ISLAND 02865 (401) 721-1609 CONTACT: TRACEY ROLL ARCHITECT BKA ARCHITECTS, INC. 142 CRESCENT STREET

BROCKTON, MA 02302

CONTACT: KEVIN PATON

(508) 583-5603

CIVIL ENGINEER

VHB, INC.

50 MAIN STREET, SUITE 360
WHITE PLAINS, NY

100 GREAT MEADOW ROAD
SUITE 200
WETHERSFIELD, CT 06109
(860)807-4300

CONTACT: MARK GROCKI

ENGINEERING, SURVEYING &

LANDSCAPE ARCHITECTURE, PC.

SURVEYOR
VHB, INC.
ENGINEERING, SURVEYING &
LANDSCAPE ARCHITECTURE, PC
100 MOTOR PARKWAY, SUITE 135
HAUPPAUGE, NY 11788

100 GREAT MEADOW ROAD SUITE 200 WETHERSFIELD, CT 06109 (860)807-4300 CONTACT: CHRISTOPHER DANFORTH

### SITE DEVELOPMENT PLANS FOR:

# CVS/pharmacy®

STORE NO. 10688

SOUTH PLANK ROAD (RTE. 52) & UNION AVENUE (RTE. 300)

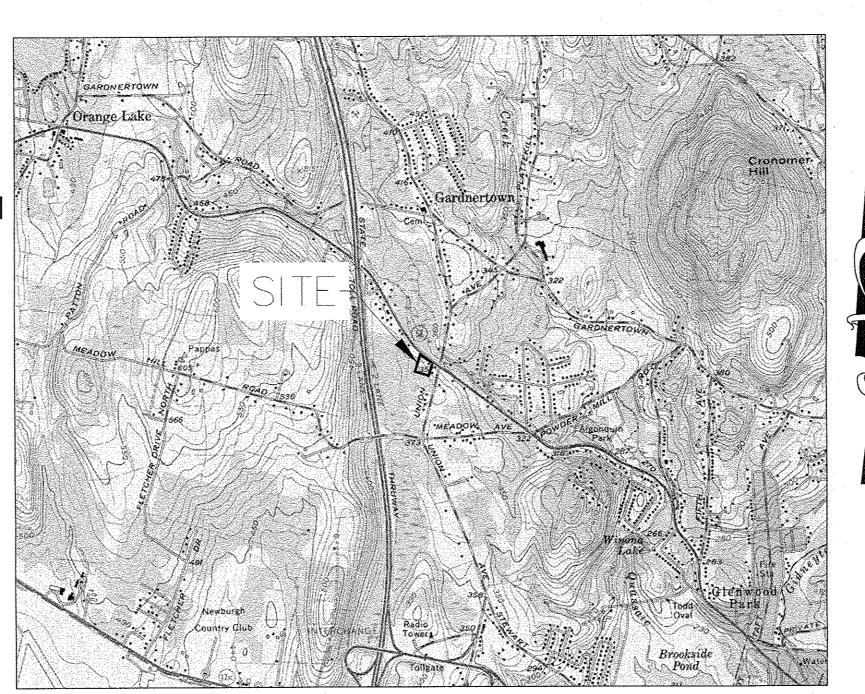
TOWN OF NEWBURGH, NEW YORK MAP 60 BLOCK 3 LOT 5.2

ZONED: B- BUSINESS & IB - INDUSTRIAL BUSINESS C-2

GEOTECHNICAL ENGINEER
RANSOM CONSULTING, INC.
PEASE INTERNATIONAL TRADEPORT
II2 CORPORATE DRIVE
PORTSMOUTH, NEW HAMPSHIRE 0380I
(603)436-I490
CONTACT: KENNETH W. MILENDER
ENVIRONMENTAL ENGINEER
RANSOM CONSULTING, INC.
2127 HAMILTON AVENUE
HAMILTON, NEW JERSEY 086I9
(609)584-0090
CONTACT: BRIAN PETTINGILL

#### UTILITY PROVIDERS

WATER AND SEWER
TOWN OF NEWBURGH WATER &
SEWER DEPARTMENT
WATER: (845) 564-7083
SEWER: (845) 564-7813(205)
CONTACT: STEVE GROGAN (SEWER)
AND JOHN PLATT (WATER)
ELECTRIC AND GAS
CENTRAL HUDSON GAS AND
ELECTRIC CORP
NEWBURGH DIVISION
(845)452-2700
CONTACT: LISA CARVER
TELECOMMUNICAITONS
FRONTIER



VICINITY MAP

SITE AREA = ±2.7 ACRES

#### PREPARED BY:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360
White Plains, NY 10606 914.467.6600
100 Great Meadow Road Suite 200
Wethersfield, CT 06109 860.807.4300

OCTOBER 19, 2015 41847.44

#### SHEET INDEX

COVER SHEET

LEGEND, ABBREVIATIONS & GENERAL NOTES

C-2 LAYOUT & MATERIALS PLAN

C-3 GRADING & DRAINAGE PLAN

C-4 UTILITY PLAN

C-4.1 TOWN WATER & SEWER SYSTEM NOTES

C-5 EROSION & SEDIMENTATION CONTROL PLAN

C-6 SITE DETAILS I

C-7 SITE DETAILS 2

C-8 SITE DETAILS 3

C-9 SITE DETAILS 4

C-IO SITE DETAILS 5

C-II SITE DETAILS 6

C-I2 SITE DETAILS 7
L-I PLANTING PLAN

L-2 PLANTING DETAILS

#### REFERENCE PLANS

SV-I ALTA/ACSM LAND TITLE SURVEY-PROPERTY SURVEY

SV-2 ALTA/ACSM LAND TITLE SURVEY-TOPOGRAPHIC SURVEY

SL-I SITE LIGHTING PLAN

TT-I TRUCK TURNING MOVEMENT PLAN I - WB-62

TT-2 TRUCK TURN MOVEMENT PLAN 2 - WB-62

AI FLOOR PLAN AND DETAILS

A4 EXTERIOR ELEVATIONS

BUILDING SIGNAGE - SIGN ELEVATION

I.2 BUILDING SIGNAGE - SITE PLAN

# REVISIONS: NO. DESCRIPTION: INITIALS: DATE: 1. PER TOWN COMMENTS AMK 11/23/15 2. PER TOWN COMMENTS AMK 12/17/15 INITIALS: DATE: AMK 11/23/15 AMK 12/17/15 INITIALS: DATE: AMK 11/23/15

| **************************************   |  | Le                                 | gend   | *************************************** |  |
|--|--|------------------------------------|--|---|--|
| Exist.   | Prop.  |                                    | Exist.   | Prop.                                   |  |
| <del> </del>   |  | PROPERTY LINE                      |  |   | CONCRETE                               |
|  | <del></del>  | PROJECT LIMIT LINE                 |  |   | HEAVY DUTY PAVEMENT                    |
|  |  | RIGHT-OF-WAY/PROPERTY LINE         | <u> </u>   |   | RIPRAP                                 |
|  |  | EASEMENT                           |  |   | CONSTRUCTION ENTRANCE                  |
|  |  | BUILDING SETBACK                   | 27.35 TC×  | 27.35 TC×                               | TOP OF CURB ELEVATION                  |
| *0.00  | 10.00  | PARKING SETBACK                    | 26.85 90×  | 26.85 BC×                               | BOTTOM OF CURB ELEVATION               |
| 10+00  | 10+00  | BASELINE                           |  |   |  |
|  |  | CONSTRUCTION LAYOUT                | 132.75 ×   | 132.75 ×<br>45.0 TW.                    | SPOT ELEVATION                         |
|  |  | ZONING LINE                        | 38.5 BW  | 45.0 TW × 38.5 FG                       | TOP OF WALL & FINISHED GRADE ELEVATION |
| <del></del>  |  | TOWN LINE                          | -0-  | •                                       | BORING LOCATION                        |
| · · · · · · · · · · · · · · · · · · ·  | The second secon |                                    |  | ■ MW                                    | TEST PIT LOCATION                      |
|  | <del>-</del>   | LIMIT: OF DISTURBANCE              | - OMW  | <b>→</b> ,v: • •                        | MONITORING WELL                        |
| <u> — — Д.</u> . —   |  | WETLAND LINE WITH FLAG             |  | UD                                      | UNDERDRAIN                             |
|  | BARA, 649-948 (SPA)-649-en-historial-stands-secure-stands-secured  | FLOODPLAIN                         | 12"0   | 12*D                                    | DRAIN                                  |
| BLSF   |  | BORDERING LAND SUBJECT TO FLOODING |  | 6"RD→                                   | ROOF DRAIN                             |
| 8z   |  | WETLAND BUFFER ZONE                | waxaanaya 255  | 12*S                                    | SEWER                                  |
| NDZ-   |  | NO DISTURB ZONE                    | down terminal termin  | FM                                      | FORCE MAIN                             |
|  |  |                                    | en reger men regeration at the Confederation of the | OHW                                     | OVERHEAD WIRE                          |
| 200'RA   |  | 200' RIVERFRONT AREA               | es pue en como como en la seguir de la como como como como como como como com  | 6"W                                     | WATER                                  |
| MA compositions compositions second-comp   |  | GRAVEL ROAD                        | manuscript 1 pr p conservance  | 4"FP                                    |  |
| EOP management   |  | EDGE OF PAVEMENT                   | 7 8 8  | 2"DW                                    | FIRE PROTECTION  DOMESTIC WATER        |
| <u>BB</u>  | 8B   | BITUMINOUS BERM                    | 3°G  | C                                       |  |
| EC   | BC   | BITUMINOUS CURB                    |  |   | GAS                                    |
|  | CC   | CONCRETE CURB                      | summer STM conserves   | STM                                     | ELECTRIC                               |
|  | CG   |                                    | 2181   |   | STEAM                                  |
| in managament de la company  | ECC  | CURB AND GUTTER                    | Anny P   |   | TELEPHONE                              |
| eterment and the manufacture and the second  | MCC  | EXTRUDED CONCRETE CURB             | AMBANI AND   | FA                                      | FIRE ALARM                             |
|  | PCC  | MONOLITHIC CONCRETE CURB           | wasaning CATV sasanina   | CATV                                    | CABLE TV                               |
| masandi Samasanana   | SGE  | PRECAST CONC. CURB                 | \$3  |   | CATCH BASIN                            |
|  | VGC  | SLOPED GRAN, EDGING                |  |   | DOUBLE CATCH BASIN                     |
| engriganisminin negamentati apinganangan<br>NCC  | ***  | VERT. GRAN. CURB                   | 888  | EEEB                                    | GUTTER INLET                           |
|  | X  | LIMIT OF CURB TYPE                 | 0  | •                                       | DRAIN MANHOLE                          |
| TI   |  | SAWCUT                             | September 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | amanan                                  | TRENCH DRAIN                           |
|  |  |                                    | <u>;</u>   | Ε                                       | PLUG OR CAP                            |
|  |  | BUILDING                           | CO   | CO                                      | CLEANOUT                               |
|  | <b>]</b> EN  | BUILDING ENTRANCE                  |  | <b>&gt;</b>                             | FLARED END SECTION                     |
| , Å  | <b>■</b> LD  | LOADING DOCK                       | × /  |   | HEADWALL                               |
| <b>*</b>   | •  | BOLLARD                            | Notes mayor  |   | TICOTALE.                              |
|  | D  | DUMPSTER PAD                       | 8  | •                                       | SEWER MANHOLE                          |
| And the same   |  | SIGN                               | CS<br>®  | CS<br><b>●</b>                          | CURB STOP & BOX                        |
| on replacement of  | and the same of th | DOUBLE SIGN                        | WV   | ₩V                                      | WATER VALVE & BOX                      |
|  |  |                                    | TSV  | TSV                                     | TAPPING SLEEVE, VALVE & BOX            |
| ), july to (-10 th forward purples to the comment of sugar from the to the sum on any sum of the comment of the | <u>T</u>   | STEEL GUARDRAIL                    |  | <b>→</b>                                | SIAMESE CONNECTION                     |
| en kanarinnelan erismiyakan kanarikin kilabatarinneli yani salami kilabatarik kun salami<br>en kanarinnelan erismiyakan kanarikin kilabatarinneli yani salami kilabatarik kun salami kilabatarik kilabatar   |  | WOOD GUARDRAIL                     | HYD.   | HYD<br><b>⊙</b>                         |  |
| туулан нанада <b>магатуулуу</b> да алуын жайга — <b>жа</b> атага   |  |                                    | W  | WM                                      | FIRE HYDRANT                           |
|  | Addition of the state of the st | PATH                               | PIV<br>®   | ⊡<br>PIV<br>⊚                           | WATER METER                            |
|  |  | TREE LINE                          | **   |   | POST INDICATOR VALVE                   |
| de frances and enements accommon consequent frances and the consequences and the consequences are a second  | <del>-xx-</del>  | WIRE FENCE                         |  | <u> </u>                                | WATER WELL                             |
| ger gebruik der som familier de des sellen som han de til som de flygger og de form  | •  | FENCE                              | 96<br>(2)  | <b>G</b> G                              | GAS GATE                               |
| By good for the section of the secti | 19511  | STOCKADE FENCE                     | OM<br>ED   | GM<br>⊡                                 | GAS METER                              |
|  | .000000  | STONE WALL                         | © ·  | <b>©</b> EMH                            | ELECTRIC MANUALE                       |
| merceforther is merce & Novelforth The deal Novelforth Person<br>a confinency of the Scotter Delegation Person (Section 1987)  |  | RETAINING WALL                     |  | EM                                      | ELECTRIC MANHOLE                       |
| of the design of the state of t |  | STREAM / POND / WATER COURSE       |  | 8                                       | ELECTRIC METER                         |
| ny firita laure di dinaminina di manamatana and man | ***************************************  | DETENTION BASIN                    | XX   | *                                       | LIGHT POLE                             |
| Proposition of the state of the |  | HAY BALES                          | (1)  | <b>⊕</b> ™H                             | TELEPHONE MANHOLE                      |
| ana na Karamana na  | ××   | SILT FENCE                         | an sylvarian g   |   | TRANSFORMER PAD                        |
| 40   |  | SILT SOCK / STRAW WATTLE           | <i>7</i> 4   |   |  |
|  |  |                                    | ~Ç~  | -•                                      | UTILITY POLE                           |
| on some over the same was the  | 4  | MINOR CONTOUR                      | <u></u>  | •-                                      | GUY POLE                               |
| <u> </u>   | 20   | MAJOR CONTOUR                      | 1  | Ţ                                       | GUY WIRE & ANCHOR                      |
| 10)  | (10)   | PARKING COUNT                      |  | HH<br>□                                 | HAND HOLE                              |
| Sugar  | ©10)   | COMPACT PARKING STALLS             | 29<br>2  | PB<br>⊡                                 | PULL BOX                               |
| DYL  | DYL  | -                                  | Matc   | hline                                   |  |
| an an a mangan and a proposed figures in the complete to the complete  | SL   | DOUBLE YELLOW LINE                 | iviale   | · · · · · · · · · · · · · · · · · · ·   | MATCHLINE                              |
|  |  | STOP LINE                          |  |   |  |
| The state of the s |  | CROSSWALK                          |  |   |  |
|  |  | ACCESSIBLE CURB RAMP               |  |   |  |
| Å  | Ě.   | ACCESSIBLE PARKING                 |  |   |  |
| Es<br>VAN  |  |                                    |  |   |  |

#### **Abbreviations**

#### General ABAN ABANDON ACCESSIBLE CURB RAMP **ADJUST** APPROX APPROXIMATE BITUMINOUS BOTTOM OF SLOPE

DOUBLE YELLOW CENTER LINE ELEVATION

CONCRETE

BROKEN WHITE LANE LINE

ELEVATION EDGE OF PAVEMENT

> EXISTING **EXIST** FOUNDATION

FIRST FLOOR ELEVATION GRAN GRANITE GRADE TO DRAIN

LANDSCAPE AREA LIMIT OF DISTURBANCE

MAX MAXIMUM MINIMUM

NOT IN CONTRACT

NOT TO SCALE PERF PERFORATED

PROP PROPOSED REM REMOVE

RETAIN

REMOVE AND DISPOSE REMOVE AND RESET

SOLID WHITE EDGE LINE

SOLID WHITE LANE LINE TOP OF SLOPE

TYP TYPICAL.

CB CATCH BASIN

CLEANOUT

DCB DOUBLE CATCH BASIN

DMH DRAIN MANHOLE

CIP CAST IRON PIPE

COND CONDUIT DUCTILE IRON PIPE

FES FLARED END SECTION

FM FORCE MAIN FRAME AND GRATE

FRAME AND COVER GUTTER INLET

GREASE TRAP

HIGH DENSITY POLYETHYLENE PIPE

HANDHOLE

HEADWALL

**HYDRANT** 

INVERT ELEVATION

INVERT ELEVATION

LP

UG

UP

LIGHT POLE MES METAL END SECTION

PAVED WATER WAY

POLYVINYLCHLORIDE PIPE

PIV POST INDICATOR VALVE

REINFORCED CONCRETE PIPE

RIM ELEVATION

SEWER MANHOLE

TAPPING SLEEVE, VALVE AND BOX

UNDERGROUND

UTILITY POLE

- CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-962-7962) AT LEAST 72 HOURS BEFORE EXCAVATING.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- 3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND
- 4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6 INCHES LOAM AND SEED.
- 5. WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.

LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).

DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.

- 6. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY
- 7. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT
- 8. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- 10. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- 11. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- 12. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- 13. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- 14. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.

- 1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED. THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
- 3. SET CATCH BASIN RIMS. AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
- 4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
- A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
- B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
- C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- 5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
- 6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS. ELECTRIC. TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
- 7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
- A. WATER PIPES SHALL BE DUCTILE IRON MANUFACTURED AND INSTALLED IN ACCORDANCE WITH AWWA C151, AWWA C111, AWWA C104 AND AWWA C600, LATEST REVISIONS FOR GREATER THAN 2" DIAMETER AND TYPE K COPPER MANUFACTURED AND INSTALLED IN CONFORMANCE WITH ASTM 888, IN ACCORDANCE WITH AWWA C800, LATEST REVISIONS FOR 2" DIAMETER AND LESS.
- B. SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE
- C. STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) SMOOTH INTERIOR.
- 8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION. INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
- 9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
- 10. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

#### Notes:

#### Layout and Materials

- 1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- 2. CURB RADII ARE 3 FEET UNLESS OTHERWISE NOTED.

INDICATED ON THE PLANS.

- 3. CURBING SHALL BE EXTRUDED CONCRETE CURB (ECC) WITHIN THE SITE UNLESS OTHERWISE
- 4. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- 5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
- 6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
- 7. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND AREA NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
- 8. CONTRACTOR SHALL NOT RELY SOLEY ON ELECTRONIC VERSIONS OF THE PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

- 1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES. SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
- 2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
- CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL. STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- 4 THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE
- 5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

- 1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE. THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT
- 2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- 3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY
- WATER, WIND, OR DIRECT DEPOSIT. 4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED
- TO PREVENT EROSION. 5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT

#### **Existing Conditions Information**

- 1. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VHB, INC. ON JUNE 2, 2015 AND JUNE 3,
- 2. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD 88.

AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

GEOTECHNICAL DATA INCLUDING TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED FROM RANSOM CONSULTING, INC. REPORT TITLED 'GEOTECHNICAL ENGINEERING EVALUATION PROPOSED CVS PHARMACY/STORE NO. 10688 NEW YORK ROUTE 52 AND ROUTE 33 - NEWBURGH, MEW YORK' DATED JULY 7, 2015..

#### Document Use

- 1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- 2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- 3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT

13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NEWBURGH, NY PROJECT TYPE: NEW

**DEAL TYPE:** FEE FOR SERVICE CS PROJECT NUMBER:

#### **ENGINEER:**



Engineering, Surveying & Landscape Architecture, PC

50 Main Street Suite 360 White Plains, NY 10606

914.467.6600

100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

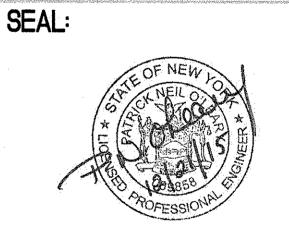
#### **DEVELOPER**:

CROWLEY

& ASSOCIATES T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101

LINCOLN, RHODE ISLAND 02865

TEL (401) 721-1607 FAX (401) 721-1601



REVISIONS:

2 PER TOWN COMMENTS 12/17/15 1 PER TOWN COMMENTS 11/23/15 PROJECT MANAGER: PNO PLANNING ENGINEER: AMK / AEF REVIEWED BY: MRG

JOB NUMBER: 41847.44 Legend, Abbreviations &

October 19, 2015.

General Notes SHEET NUMBER:

DATE:

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NOT ISSUED FOR CONSTRUCTION

#### **Zoning Summary Chart** Zoning Districts: B - Business &

| IB - Interchange Business      |                            |                           |  |  |
|--------------------------------|----------------------------|---------------------------|--|--|
| Zoning Regulation Requirements | Required *                 | Provided                  |  |  |
| MINIMUM LOT AREA               | 15,000 SF<br>(±0.34 ACRES) | 117,978 SF<br>(2.7 ACRES) |  |  |
| FRONTAGE                       | N/A                        | 353.8 FT                  |  |  |
| FRONT YARD SETBACK             | 60 FT                      | 175 FT                    |  |  |
| SIDE YARD SETBACK              | · 15 FT                    | 56.6 FT                   |  |  |
| REAR YARD SETBACK              | 30 FT                      | 60.0 FT                   |  |  |
| MINIMUM LOT WIDTH              | 100 FT                     | 236 FT                    |  |  |
| MINIMUM LOT DEPTH              | 125 FT                     | 348 FT                    |  |  |
| MAXIMUM BUILDING HEIGHT        | 35 FT                      | 20'-4"                    |  |  |
| MAXIMUM BUILDING COVERAGE      | 60%                        | 11.5%                     |  |  |
| MAXIMUM LOT SURFACE COVERAGE   | 85%                        | 63.7%                     |  |  |

<sup>\*</sup> REQUIRED ZONING SHOWN OF B - BUSINESS DISTRICT.

INTERIOR PARKING LANDSCAPING PERCENTAGE

| Parking Summary Chart        |          |          |          |          |  |
|------------------------------|----------|----------|----------|----------|--|
|                              | Si       | Spaces   |          |          |  |
| Description                  | Required | Provided | Required | Provided |  |
| STANDARD SPACES              | 9 x 18   | 9 x 18   | TBD      | 68       |  |
| STANDARD ACCESSIBLE SPACES * | 8 x 18   | 8 x 18   | TBD      | 3        |  |
| VAN ACCESSIBLE SPACES        | 8 x 18   | 8 x 18   | 1        | 1        |  |
| TOTAL SPACES                 | 7        |          | TBD      | . 72     |  |
| LOADING BAYS**               |          |          | 1        | 1        |  |

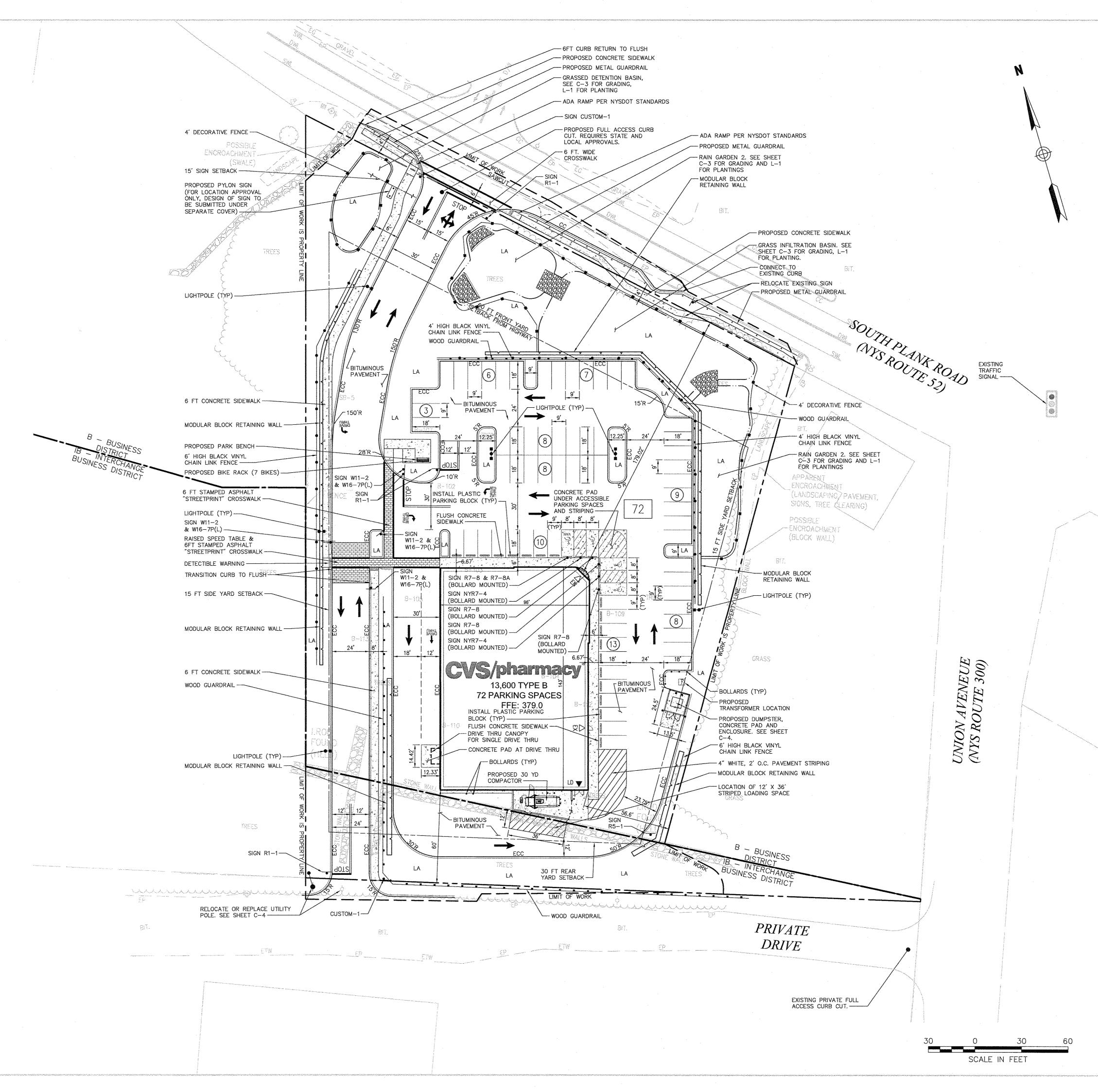
5%

5%

<sup>\*\*</sup> LOADING SPACES: BUILDING UNDER 25,000 SF - 1 LOADING SPACE IS REQUIRED.

| $\sim$ | $\sim$      |          |       |
|--------|-------------|----------|-------|
| Sign   | <b>NIII</b> | m        | 1 1 T |
| DISI   | Dum         | A EEE E. | e e y |

| Sign Summary         |               |             |                               |  |  |
|----------------------|---------------|-------------|-------------------------------|--|--|
| M.U.T.C.D.           | Specif        | Dogg        |                               |  |  |
| M.U.T.C.D.<br>Number | Width         | Height      | Desc.                         |  |  |
| R1-1                 | 30*           | 30°         | STOP                          |  |  |
| R7-8                 | 12"           | 18"         | RESERVED PARKING              |  |  |
| R78A                 | 12"           | 6°*         | VAN<br>ACCESSIBLE             |  |  |
| NYR7-4               | 12"           | 18"         | NO<br>STOPPING<br>ANY<br>TIME |  |  |
| R5–1                 | 30"           | 30 <b>"</b> | DO NOT<br>ENTER               |  |  |
| W11~2                | 30 <b>"</b>   | 30"         | (K)                           |  |  |
| W16-7P(L)            | 24"           | 12"         | K                             |  |  |
| Custom<br>Signs      | Specification |             | Desc.                         |  |  |
| Signs                | Width         | Height      | Desc.                         |  |  |
| CUSTOM-1             | 12"           | 18"         | NO<br>PASS<br>THRU<br>TRAFFIC |  |  |





13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER: SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NEWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER:

#### ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606

914.467.6600 100 Great Meadow Road Suite 200

Wethersfield, CT 06109 860.807.4300

#### DEVELOPER:

T.M.

#### CROWLEY

#### & ASSOCIATES

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

SEAL:



REVISIONS:

12/17/15 2 PER TOWN COMMENTS 1 PER TOWN COMMENTS 11/23/15 PROJECT MANAGER: PNO AMK / AEF PLANNING ENGINEER:

REVIEWED BY: DATE: October 19, 2015 41847.44 JOB NUMBER:

TITLE:

Layout & Materials Plan

SHEET NUMBER:

COMMENTS: NOT ISSUED FOR CONSTRUCTION 02\_41847.44\_LM.DWG

<sup>\*</sup> NY STATE ADA REQUIREMENTS: FOR A TOTAL 76 TO 100 SPACES PROVIDED, THE REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES IS 4 SPACES.

BENCHWARK: POLE #39272 ELEV. = 365.64° BERM. TOP MAVD 88 DATUM ELEV=366.0 15"HDPE-12"OPP | - FLARED END INV=360.7 POSSIBLE -RIP RAP PAD ENCROACHMENT. - CONCRETE CURB CONCRETE CURB LEVEL SPREADER LEVEL SPREADER ELEV=360.6 ELEV=360.6 -I=358.50 (OUT) GARDEN 2 - RAISE EX CATCH BASIN RIM TO ELEV=361.35 OCS-3 R=374.7 I=366.70 UG DET I=366.00 (OUT) RIP RAP PAD--RIPRAP OVERFLOW, - CONNECT TO EXISTING FLARED END ELEV=360.5 CATCH BASIN, INV.=358.4 INV=360.7 -— l=358.5 DMH-14 R=363.0 I=358.42 OCS-1 I=360.70 OCS-2 I=358.42 (OUT) R=368.5 I=361.20 CB-10 I=361.35 (OUT) R=361.9 I=358.45 UD I=358.45 (OUT) BERM. TOP ELEV=363.0 DMH-7 R=373.5 I=370.00 CB-8 I=370.00 CB-9 I=369.90 (OUT) -GRASSED INFILTRATION BASIN RIPRAP OVERFLOW, ELEV=360.75 BERM TOP FLEV=363.0 I=369.90 (OUT) 4FT WIDE, 1FT DEEP - RAIN GARDEN 1 GRASSED SWALE -MODULAR BLOCK UNDERGROUND INFILTRATION SYSTEM: RETAIN IT 3' HIGH CHAMBER UNITS SAND FILTER RETAINING WALL MAXIMUM HEIGHT=±6'-36 TOTAL UNITS BOTTOM OF STONE INV = 367.0 R=373.5 I=369.35 I=369.35 DMH-8 I=369.25 (OUT) BOTTOM OF CHAMBER INV = 367.5 - MODULAR BLOCK RETAINING WALL MAXIMUM HEIGHT=±18FT -ELEV=363.0 I=377.20 DMH-12 I=369.20 DMH-9 I=369.20 (OUT) - i≧359.0 € BLOCK WALE - CONC. LEVEL SPREADER DMH-6 R=378.0 I=362.00 DMH-5 I=358.50 (OUT) -2:1 SLOPE CB-3 SHALLOW R=376.8 I=373.70 (OUT) UNION AVENEUE (NYS ROUTE 300) CVS/pharmacy 13,600 TYPE B 72 PARKING SPACES -FFE: 379.0 MODULAR BLOCK -ROOF DRAIN 379.0 RETAINING WALL MAXIMUM HEIGHT=±3.1 -MODULAR BLOCK RETAINING WALL MAXIMUM HEIGHT=±3.7 EX 385.0 EX 384.25 CB-4 SHALLOW R=377.8 I=375.30 (OUT) CB-5 SHALLOW R=377.9 (OUT) PRIVATE DRIVE

ELEV. = 387.82'

MUTAG 88 GVAN

DASING SF - TYPE B
SIDE DRIVE-THRU

STORE NUMBER: 10688
SOUTH PLANK ROAD (RT 52) &
UNION AVE (RT 300)
TOWN OF NEWBURGH, NY
PROJECT TYPE: NEW
DEAL TYPE: FEE FOR SERVICE
CS PROJECT NUMBER: 84094

**ENGINEER:** 



Engineering, Surveying & Landscape Architecture, PC 50 Main Street
Suite 360

White Plains, NY 10606

100 Great Meadow Road
Suite 200
Wathersfield, CT 06109

Wethersfield, CT 06109 860.807.4300

DEVELOPER:

& ASSOCIATES

T.M. CROWLEY & ASSOCIATES
14 BREAKNECK HILL ROAD
SUITE 101
LINCOLN, RHODE ISLAND 02865

TEL (401) 721-1607 FAX (401) 721-1601

SEAL:



REVISIONS:

| 2           | PER TOWN COMMENTS | 12/17/15 |
|-------------|-------------------|----------|
| 1           | PER TOWN COMMENTS | 11/23/15 |
| ••          |                   |          |
| e portagnes |                   |          |
|             | JECT MANAGER:     | PN       |

PLANNING ENGINEER: AMK / AEF

REVIEWED BY: MRG

DATE: October 19, 2015

JOB NUMBER:

Grading & Drainage Plan

SHEET NUMBER:

SCALE IN FEET

C-3

COMMENTS:

S:
NOT ISSUED FOR CONSTRUCTION
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41847.44

GROUNDWATER LEVELS ON SITE ARE AT DEPTHS RANGING FROM APPROXIMATELY 8 FT TO 10 FT BELOW EXISTING GRADES. SEE STORMWATER MANAGEMENT REPORT FOR FURTHER DISCUSSIONS AS WELL AS THE GEOTECHNICAL ENGINEERING EVALUATION BY RANSOM CONSULTING, INC. DATED JULY 7, 2015.

#### Preliminary Cut/ Fill Analysis

|  |                       | •        | •              |  |
|--|-----------------------|----------|----------------|--|
|  | Cut                   | Fill     | Net            |  |
|  | 9,378 CY + 3,700 CY * | 6,390 CY | 6,688 CY - CUT |  |

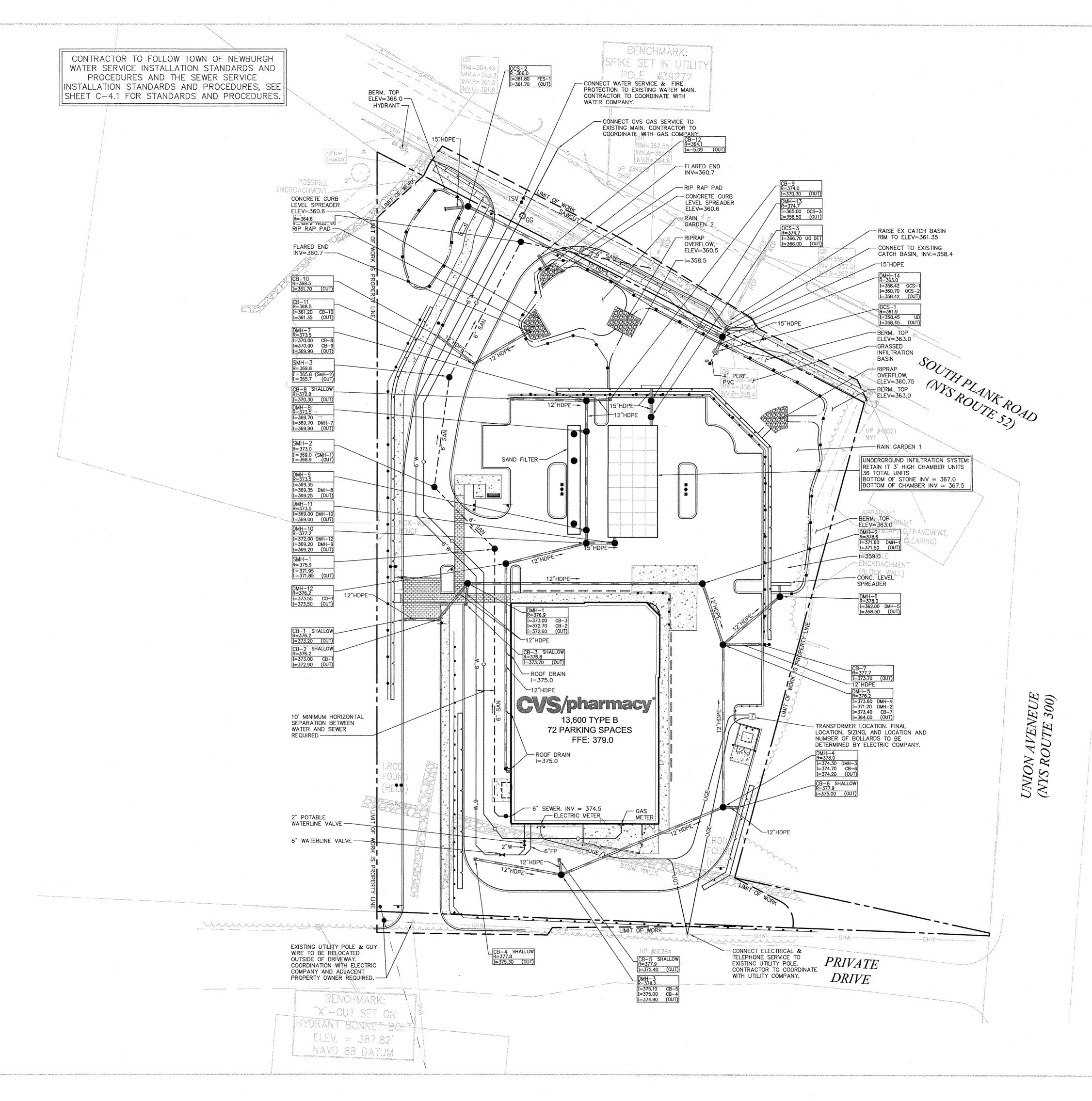
NOTE: CUT/ FILL ANALYSIS IS BASED ON SURVEY DATA OBTAINED BY VHB.

METHOD: 3D SURFACE ANALYSIS (CIVIL 3D) FROM EXISTING FINISH GRADE TO PROPOSED FINISH GRADE, NO FACTORS FOR SHRINK/SWELL HAVE BEEN APPLIED.

\* AN ADDITIONAL CUT OF APPROX. 3,700 CY HAS BEEN ADDED TO ACCOUNT FOR IMPORT MATERIAL FOR PAVEMENT SECTION & BASE MATERIAL, BUILDING SLAB & BASE MATERIAL, SIDEWALKS, CONCRETE PADS, RETAINING WALL & STONE, RAIN GARDEN BIORETENTION SOIL,

TOTAL SITE AREA TO BE CLEARED = 2.7-ACRES

RETAINING WALLS IN EXCESS OF 4 FT. IN HEIGHT ARE TO BE SUBMITTED TO THE TOWN OF NEWBURGH CODE ENFORCEMENT OFFICER.





13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER: 10688
SOUTH PLANK ROAD (RT 52) &
UNION AVE (RT 300)
TOWN OF NEWBURGH, NY
PROJECT TYPE: NEW
DEAL TYPE: FEE FOR SERVICE
CS PROJECT NUMBER: 84094

#### ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street
Suite 360
White Plains, NY 10606
914.467.6600
100 Great Meadow Road

Suite 200 Wethersfield, CT 06109 860.807.4300

#### **DEVELOPER**:

## CROWLEY

& ASSOCIATES

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14 BREAKNECK HILL ROAD
SUITE 101
LINCOLN, RHODE ISLAND 02865
TEL (401) 721—1607
FAX (401) 721—1601





REVISIONS:

| 2 PER TOWN COMMENTS | 12/17/15         |
|---------------------|------------------|
| 1 PER TOWN COMMENTS | 11/23/15         |
| PROJECT MANAGER:    | PNO              |
| PLANNING ENGINEER:  | AMK / AEF        |
| REVIEWED BY:        | MRG              |
| DATE:               | October 19, 2015 |
| JOB NUMBER:         | 4 847.44         |

Utility Plan

SHEET NUMBER:

 $C-\omega$ 

COMMENTS

NOT ISSUED FOR CONSTRUCTION
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#### TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE PLANS

- 1. "Construction of potable water utilities and connection to the Town of Newburgh water system requires a permit from the Town of Newburgh Water Department. All work and materials shall conform to the requirements of the NYSDOH and the Town of Newburgh."
- All water service lines four (4) inches and larger in diameter shall be cement lined class 52 ductile iron pipe conforming to ANSI\AWWA C151\A21.51 for Ductile Iron Pipe, latest revision. Joints shall be either push-on or mechanical joint as required.
- Thrust restraint of the pipe shall be through the use of joint restraint. Thrust blocks are not acceptable. Joint restraint shall be through the use of mechanical joint pipe with retainer glands. All fittings and valves shall also be installed with retainer glands for joint restraint. Retainer glands shall be EBBA Iron Megalug Series 1100 or approved equal. The use of a manufactured restrained joint pipe is acceptable with prior approval of the Water Department.
- All fittings shall be cast iron or ductile iron, mechanical joint, class 250 and conform to ANSI\AWWA C110\A21.10 for Ductile and Gray Iron Fittings or ANSI\AWWA C153\A21.53 for Ductile Iron Compact Fittings, latest revision.
- All valves 4 to 12 inches shall be Resilient Wedge Gate Valves conforming to ANSI\AWWA C509 such as Mueller Model A-2360-23 or approved equal. All gate valves shall open left (counterclockwise).
- Tapping sleeve shall be mechanical joint such as Mueller H-615 or equal. Tapping valves 4 to 12 inches shall be Resilient Wedge Gate Valves conforming to ANSI\AWWA C509 such as Mueller Model T-2360-19 or approved equal. All tapping sleeves and valves shall be tested to 150 psi minimum; testing of the tapping sleeve and valve must be witnessed and accepted by the Town of Newburgh Water Department prior to cutting into the pipe.

Original 12-06-96 Revised 04-24-02 Revised 01-2015

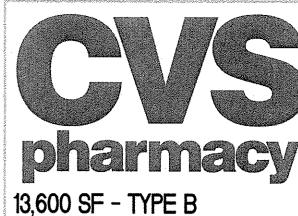
#### TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE PLANS

- All hydrants shall be Clow-Eddy F-2640 conforming to AWWA Standard C-502, latest revision. All hydrants shall include a 5 ¼ inch main valve opening, two 2 ½ inch diameter NPT hose nozzles, one 4 inch NPT steamer nozzle, a 6 inch diameter inlet connection and a 1 ½ inch pentagon operating nut. All hydrants shall open left (counter-clockwise). Hydrants on mains to be dedicated to the Town shall be Equipment Yellow. Hydrants located on private property shall be Red.
- All water service lines two (2) inches in diameter and smaller shall be type K copper tubing. Corporation stops shall be Mueller H-15020N for ¾ and 1 inch, Mueller H-15000N or B-25000N for 1 ½ and 2 inch sizes. Curb valves shall be Mueller H-1502-2N for ¾ and 1 inch and Mueller B-25204N for 1 ½ and 2 inch sizes. Curb boxes shall be Mueller H-10314N for ¾ and 1 inch and Mueller H-10310N for 1 ½ and 2 inch sizes.
- All pipe installation shall be subject to inspection by the Town of Newburgh Water Department. The contractor shall be responsible for coordinating all inspections as required with the Town of Newburgh Water Department.
- The water main shall be tested, disinfected and flushed in accordance with the Town of Newburgh requirements. All testing, disinfection and flushing shall be coordinated with the Town of Newburgh Water Department. Prior to putting the water main in service satisfactory sanitary results from a certified lab must be submitted to the Town of Newburgh Water Department. The test samples must be collected by a representative of the testing laboratory and witnessed by the Water Department.
- The final layout of the proposed water and/or sewer connection, including all materials, size and location of service and all appurtenances, is subject to the review and approval of the Town of Newburgh Water and/or Sewer Department. No permits shall be issued for a water and/or sewer connection until a final layout is approved by the respective Department.

Original 12-06-96 Revised 04-24-02 Revised 01-2015

#### **TOWN SEWER SYSTEM NOTES**

- 1. Construction of sanitary sewer facilities and connection to the Town of Newburgh sanitary sewer system requires a permit from the Town of Newburgh Sewer Department. All construction shall conform to the requirements of the NYSDEC and the Town of Newburgh.
- All sewer pipe installation shall be subject to inspection by the Town of Newburgh Sewer Department. The Contractor shall be responsible for coordinating all inspections as required with the Town of Newburgh Sewer Department.
- All gravity sanitary sewer service lines shall be 4 inches in diameter or larger and shall be SDR-35 PVC pipe conforming to ASTM D-3034-89. Joints shall be push-on with elastomeric ring gasket conforming ASTM D-3212. Fittings shall be as manufactured by the pipe supplier or equal and shall have a bell and spigot configuration compatible with the pipe.
- 4. The sewer main shall be tested in accordance with Town of Newburgh requirements. All testing shall be coordinated with the Town of Newburgh Sewer Department.
- 5. The final layout of the proposed water and/or sewer connection, including all materials, size and location of service and all appurtenances, is subject to the review and approval of the Town of Newburgh Water and/or Sewer Department. No permits shall be issued for a water and/or sewer connection until a final layout is approved by the respective Department.



SIDE DRIVE-THRU

STORE NUMBER: 10688 SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NEWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER: 84094

**ENGINEER:** 



Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606 914.467.6600

100 Great Meadow Road Suite 200

Wethersfield, CT 06109 860.807.4300

DEVELOPER:

T.M.

CROWLEY

& ASSOCIATES T.M. CROWLEY & ASSOCIATES

14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

SEAL:



REVISIONS:

2 PER TOWN COMMENTS 12/17/15 1 PER TOWN COMMENTS 11/23/15 PROJECT MANAGER: PNO PLANNING ENGINEER: AMK / AEF REVIEWED BY: MRGDATE: October 19, 2015 JOB NUMBER: 41847.44

Town Water & Sewer Sytem Notes

SHEET NUMBER:

04\_41847.44\_UT.DWG

NOT ISSUED FOR CONSTRUCTION

REFER TO THE DRAINAGE/STORMWATER MANAGEMENT REPORT FOR MORE INFORMATION.

#### Site S&E Narrative:

THE PROPOSED PROJECT CONSISTS OF CONSTRUCTING AN APPROXIMATELY 13,600 SQUARE FOOT RETAIL BUILDING WITH ASSOCIATED PARKING, DRIVEWAYS, UNDERGROUND UTILITIES, AND STORMWATER MANAGEMENT SYSTEM. THE APPROXIMATELY 2.7 ACRE SITE WILL BE DEVELOPED IN A SINGLE PHASE PROJECT. THE ENTIRE 2.7 ACRE SITE WILL BE

TO CONTROL SEDIMENT EROSION DURING EARTH FILLING OPERATIONS, THE CONTRACTOR SHALL EMPLOY TECHNIQUES OUTLINED IN THE CONSTRUCTION SEQUENCE AND EROSION CONTROL NOTES TO ENSURE THAT EROSION DOES NOT OCCUR AND THAT SEDIMENT IS NOT TRANSPORTED OFF-SITE.

THE EARTHWORK IS PLANNED TO START FEBRUARY 2016 AND BE COMPLETED NOVEMBER 2016.

THE EROSION AND SEDIMENTATION CONTROLS SHALL BE EMPLOYED BY THE CONTRACTOR DURING THE EARTHWORK AND CONSTRUCTION PHASES OF THE PROJECT IN ACCORDANCE WITH THE NYS DEC EROSION GUIDELINES.

#### Construction Sequence

THE SITE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT ROADS/HIGHWAYS AND THEIR DRAINAGE SYSTEM, NEIGHBORING PROPERTIES, AND REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT. PRIOR TO CONSTRUCTION, THE APPLICANT SHALL PROVIDE THE TOWN OF NEWBURGH, NEW YORK WITH THE NAME OF CONTACT AND 24 HOUR CONTACT INFORMATION.

CONTRACTOR SHALL ADHERE TO NYS DEC GUIDELINES FOR EROSION AND SEDIMENT CONTROL. CONTRACTOR SHALL PREPARE AND SUBMIT THE SWPPP AND NOI TO THE APPROVING AUTHORITY PRIOR TO CONSTRUCTION.

FLAG THE LIMITS OF CONSTRUCTION NECESSARY TO FACILITATE THE PRECONSTRUCTION MEETING. HOLD PRECONSTRUCTION MEETING. (REMEMBER TO CALL "DIG SAFE" 1-800-962-7962). NOTIFY THE TOWN OF NEWBURGH, NEW YORK AGENT, ZONING ENFORCEMENT OFFICER AND ENGINEERING DEPARTMENT, 48 HOURS PRIOR TO

COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY. INSTALL STABILIZED VEHICLE CONSTRUCTION ENTRANCE. PRIOR TO INSTALLING SURFACE WATER CONTROLS SUCH AS TEMPORARY DIVERSION SWALES OR TEMPORARY SEDIMENT TRAPS, INSPECT EXISTING CONDITIONS TO ENSURE DISCHARGE LOCATIONS ARE STABLE, IF NOT STABLE, REVIEW DISCHARGE CONDITIONS WITH THE DESIGN

ENGINEER AND IMPLEMENT ADDITIONAL STABILIZATION MEASURES PRIOR TO INSTALLING SURFACE WATER CONTROLS. INFILTRATION TESTING SHALL BE PERFORMED PRIOR TO CONSTRUCTION. INSTALL EROSION AND SEDIMENT CONTROLS IN ACCORDANCE WITH THE E&S PLAN FOR THE SITE INCLUDING SILTFENCE BARRIERS, SILT SOCKS, STRAW BALES, AND SILT SACKS.

COMPLETE CLEARING AND GRUBBING. ESTABLISH ROUGH GRADE ON THE SITE.

CONSTRUCT 13,600± SF FREE STANDING RETAIL PHARMACY BUILDING AND UNDERGROUND UTILITIES. INSTALL SILT SACKS SEDIMENT TRAPS IN ALL NEW CATCH BASINS. CONSTRUCT RETAINING WALLS

BEGIN FORMATION OF INFILTRATION BASIN & RAIN GARDENS & STABILIZE SLOPES WITH EROSION CONTROL MATTING & HYDROSEED. 5. CONSTRUCT DRIVE—THRU AND DRIVE—THRU LANE.
7. INSTALL PAVEMENT BASE & FIRST COURSE OF BITUMINOUS CONCRETE MILL PAVEMENT SURFACE IN LIMIT OF WORK.

INSTALL LANDSCAPING. O. LOAM AND SEED ALL DISTURBED AREAS.

21. WHEN ALL OTHER WORK HAS BEEN COMPLETED, REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED. 22. INSTALL FINAL OVERLAY COURSE OF PAVEMENT.

ONCE SITE IS STABILIZED AND VEGETATION IS ESTABLISHED, REVIEW CONDITIONS WITH TOWN AND DETERMINE IF THE REMAINDER OF EROSION AND SEDIMENT CONTROLS CAN BE REMOVED.

#### Erosion and Sedimentation Control Tecniques

THE FOLLOWING EROSION AND SEDIMENTATION CONTROLS SHALL BE EMPLOYED BY THE CONTRACTOR DURING THE EARTHWORK AND CONSTRUCTION PHASES OF THE PROJECT IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL AUGUST 2005.

IN AREAS WHERE HIGH RUNOFF VELOCITIES OR HIGH SEDIMENT LOADS ARE EXPECTED, HAY BALE BARRIERS WILL BE BACKED UP WITH SILT FENCING. THIS SEMI-PERMEABLE BARRIER MADE OF A SYNTHETIC POROUS FABRIC WILL PROVIDE ADDITIONAL PROTECTION. THE SILT FENCES AND HAY BALE BARRIER WILL BE REPLACED AS DETERMINED BY PERIODIC FIELD INSPECTIONS.

STRAW BALE BARRIERS WILL BE PLACED TO TRAP SEDIMENT TRANSPORTED BY RUNOFF BEFORE IT REACHES THE DRAINAGE SYSTEM OR LEAVES THE CONSTRUCTION SITE. BALES WILL BE SET AT LEAST FOUR INCHES INTO THE EXISTING GROUND TO MINIMIZE

#### CATCH BASIN PROTECTION NEWLY CONSTRUCTED AND EXISTING CATCH BASINS WILL BE PROTECTED WITH SILT SACKS THROUGHOUT CONSTRUCTION.

STABILIZED CONSTRUCTION ENTRANCE/EXIT A TEMPORARY CRUSHED-STONE CONSTRUCTION ENTRANCE/EXIT WILL BE CONSTRUCTED. A CROSS SLOPE WILL BE PLACED IN THE

ENTRANCE TO DIRECT RUNOFF TO THE SEDIMENT TRAP.

VEGETATIVE SLOPE STABILIZATION
STABILIZATION OF OPEN SOIL SURFACES WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, UNLESS THERE IS SUFFICIENT SNOW COVER TO PROHIBIT IMPLEMENTATION. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR FLATTER. ANNUAL GRASSES, SUCH AS ANNUAL RYE, WILL BE USED TO ENSURE RAPID GERMINATION AND PRODUCTION OF ROOTMASS. PERMANENT STABILIZATION WILL BE COMPLETED WITH THE PLANTING OF PERENNIAL GRASSES OR LEGUMES. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE

SIDESLOPES OF STOCKPILED MATERIAL SHALL BE NO STEEPER THAN 2:1. STOCKPILES NOT USED WITHIN 30 DAYS NEED TO BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE. HAYBALES AND SILT FENCE ARE TO BE PLACED AROUND THE

#### DUST CONTROL PERIODICALLY MOISTEN EXPOSED SURFACES ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAY DAMP AND REDUCE DUST.

CONCRETE WASHOUT STATION
STATION FOR THE SAFE CONTAINMENT AND RECYCLING OF CONCRETE WASHOUT WASTEWATER AND SOLIDS. PERMIT CONCRETE TRUCKS AND PUMPS CAN SAFELY WASH OUT AFTER POURING CONCRETE AND WASTE CAN BE DISPOSED OF IN THE APPROPRIATE MANNER.

#### Post Construction Stormwater Management

THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ENSURING THAT STORMWATER MANAGEMENT SYSTEMS BE INSPECTED AND MAINTAINED. THE FOLLOWING PLAN COMPONENTS SHALL BE ADHERED TO:

THE SITE LANDSCAPING / PERVIOUS AREA HAS BEEN INCREASED BY APPROXIMATELY 0.171 ACRES (7,450 SF) WHICH WILL DECREASE THE STORMWATER RUNOFF FLOWS FROM THE SITE. ADDITIONALLY, A COMPREHENSIVE SOURCE CONTROL PROGRAM WILL BE IMPLEMENTED AT THE SITE, WHICH INCLUDES ANNUAL CATCH BASIN CLEANING, PAVEMENT SWEEPING, AND ENCLOSURE AND MAINTENANCE OF ALL DUMPSTER, COMPACTORS AND LOADING AREAS. SNOW MANAGEMENT

AS MUCH AS POSSIBLE, SNOW WILL BE ALLOWED TO MELT ON PAVEMENT WHERE DEBRIS AND SAND MAY BE DEPOSITED AND SWEPT UP FOR DISPOSAL AND SNOW MELT CAN ENTER THE STORMWATER MANAGEMENT SYSTEM WHERE IT WILL RECEIVE PROPER TREATMENT. AMPLE SNOW STORAGE AREA IS PROVIDED BETWEEN THE FRONT PARKING FIELD AND THE FRONT DRIVEWAY, TO THE SOUTHWEST OF THE REAR DRIVEWAY, ON THE EMBANKMENT DIRECTLY BEHIND THE BUILDING, AND IN THE LANDSCAPED AREA TO THE EAST OF THE BUILDING. SNOW STORAGE WILL BE KEPT OUT OF THE INFILTRATION BASIN AND RAIN GARDEN FEATURES AS MUCH AS POSSIBLE SO SANDS, SEDIMENT, AND SALT DO NOT CLOG THE INFILTRATION PRACTICES. IF REQUIRED DURING HEAVY SNOW EVENTS, SNOW WILL BE REMOVED FROM THE SITE VIA TRUCK HAULING.

#### CATCH BASINS WITH SUMPS AND OIL/DEBRIS TRAPS

CATCH BASINS AT THE SITE ARE TO BE CONSTRUCTED WITH SUMPS (MINIMUM 4-FEET) AND OIL/DEBRIS TRAPS TO PREVENT THE DISCHARGE OF SEDIMENTS AND FLOATING CONTAMINANTS. CATCH BASINS WILL BE CLEANED TWICE PER YEAR.

#### GRASSED INFILTRATION BASIN

THE GRASSED INFILTRATION BASIN IS AN ABOVE-GROUND INFILTRATION AREA TO BE USED FOR PEAK RUNOFF AND VOLUME ATTENUATION. THE BASIN SHALL BE CLEANED OF DEBRIS AND ANY EROSION SHALL BE REPAIRED IMMEDIATELY UPON IDENTIFICATION THROUGHOUT THE YEAR.

#### RAIN GARDENS

THE RAIN GARDENS MANAGE AND TREAT STORMWATER RUNOFF USING A CONDITIONED PLANTING SOIL BED AND PLANTING MATERIALS TO FILTER RUNOFF STORED WITHIN A SHALLOW DEPRESSION. IT IS RECOMMENDED THE RAIN GARDENS BE INSPECTED MONTHLY FOR THE FIRST 3 MONTHS AFTER CONSTRUCTION COMPLETION FOR SIGNS OF EROSION, PLANT ESTABLISHMENT, EMBANKMENT STABILIZATION, ETC. THE RAIN GARDENS SHALL THEN BE INSPECTED BIANNUALLY FOR THE FIRST YEAR AND ANNUALLY THEREAFTER FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC. THE MULCH SHALL BE REPLACED OR REPLENISHED EACH YEAR, PREFERABLY IN THE SPRING.

#### UNDERGROUND DETENTION / INFILTRATION SYSTEM

THE UNDERGROUND DETENTION / INFILTRATION SYSTEM CONSISTS OF RETAIN-IT CONCRETE CHAMBERS (OR APPROVED EQUAL). IT IS RECOMMENDED THAT THE SYSTEM BE INSPECTED A MINIMUM OF TWICE PER YEAR AND CLEANED AT LEAST ONCE A YEAR, IF REQUIRED, BY MEANS OF JET-VAC.

#### SAND FILTER

THE SAND FILTER IS AN UNDERGROUND CONCRETE CHAMBER CONSISTING OF A PRE-TREATMENT SEDIMENT CHAMBER, WHICH INCLUDES DISTRIBUTION CHAMBER FOR VELOCITY DISSIPATION, A FILTRATION CHAMBER, AND OUTLET CHAMBER. THE FILTRATION CHAMBER WILL CONTAIN THE NECESSARY SAND (MEETING ASTM-C33 SPECIFICATION). IT IS RECOMMENDED THAT THE SAND FILTER BE INSPECTED TWICE PER YEAR AND SEDIMENT CHAMBER CLEANED/ VACUUMED ONCE PEAR YEAR, IDEALLY IN THE SPRING AFTER SNOWMELT. THE SAND WITHIN THE FILTRATION CHAMBER SHALL BE REPLACED WHEN FILTRATION HAS BECOME NOTICEABLY COMPROMISED, OR AFTER 10 YEARS, WHICHEVER COMES FIRST.

Temporary Erosion and Sedimentation Control Maintenace (throughout construction) THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING EACH CONTROL SHOWN ON THE SEDIMENTATION

AFTER EACH RAINFALL EVENT. RECORDS OF THE INSPECTIONS WILL BE PREPARED AND MAINTAINED ON-SITE BY

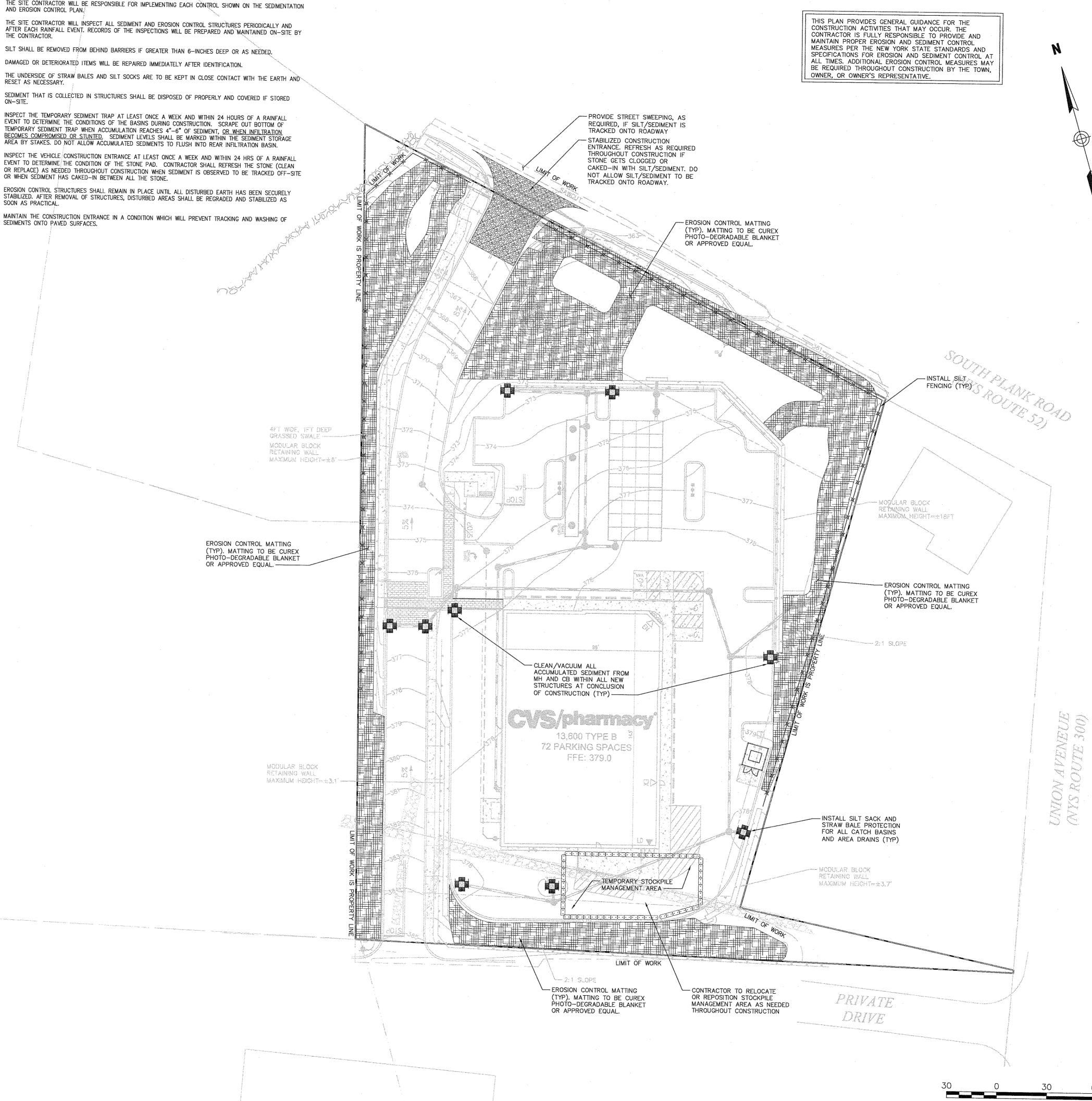
DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION. THE UNDERSIDE OF STRAW BALES AND SILT SOCKS ARE TO BE KEPT IN CLOSE CONTACT WITH THE EARTH AND

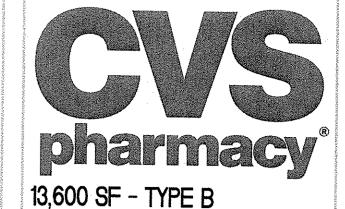
SEDIMENT THAT IS COLLECTED IN STRUCTURES SHALL BE DISPOSED OF PROPERLY AND COVERED IF STORED

INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF A RAINFALL EVENT TO DETERMINE THE CONDITIONS OF THE BASINS DURING CONSTRUCTION. SCRAPE OUT BOTTOM OF TEMPORARY SEDIMENT TRAP WHEN ACCUMULATION REACHES 4"-6" OF SEDIMENT, OR WHEN INFILTRATION BECOMES COMPROMISED OR STUNTED. SEDIMENT LEVELS SHALL BE MARKED WITHIN THE SEDIMENT STORAGE

INSPECT THE VEHICLE CONSTRUCTION ENTRANCE AT LEAST ONCE A WEEK AND WITHIN 24 HRS OF A RAINFALL EVENT TO DETERMINE THE CONDITION OF THE STONE PAD. CONTRACTOR SHALL REFRESH THE STONE (CLEAN OR REPLACE) AS NEEDED THROUGHOUT CONSTRUCTION WHEN SEDIMENT IS OBSERVED TO BE TRACKED OFF-SITE OR WHEN SEDIMENT HAS CAKED-IN BETWEEN ALL THE STONE.

EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED EARTH HAS BEEN SECURELY STABILIZED. AFTER REMOVAL OF STRUCTURES, DISTURBED AREAS SHALL BE REGRADED AND STABILIZED AS





SIDE DRIVE-THRU STORE NUMBER: SOUTH PLANK ROAD (RT 52) &

UNION AVE (RT 300)

TOWN OF NEWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER:

**ENGINEER** 



Engineering, Surveying 8 Landscape Architecture, PC 50 Main Street Suite 360

White Plains, NY 10606 914.467.6600 100 Great Meadow Road

Suite 200 Wethersfield, CT 06109 860.807.4300

#### **DEVELOPER:**

CROWLEY

& ASSOCIATES T.M. CROWLEY & ASSOCIATES

14 BREAKNECK HILL ROAD

SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

SEAL:



**REVISIONS:** 

| 12/17/15  |
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| October 19, 2015  |
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41847.44

Erosion and Sediment Control Plan

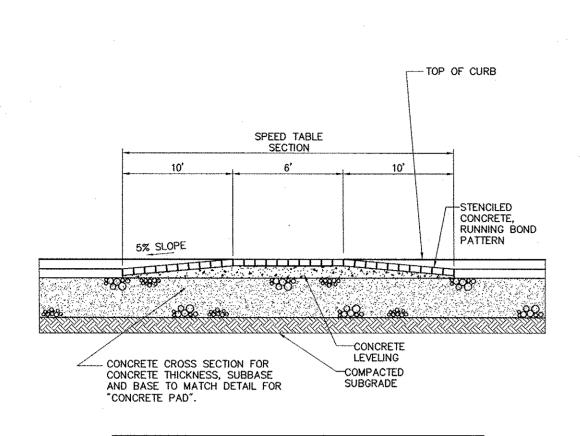
SHEET NUMBER:

JOB NUMBER:

TITLE:

SCALE IN FEET

COMMENTS: NOT ISSUED FOR CONSTRUCTION 05\_41847.44\_ER.DWG



BRICK PATTERN TO BE STAMPED INTO MECHANICALLY HEATED BITUMINOUS CONCRETE SURFACE WITH VIBRATORY PLATE COMPACTOR APPLIED TO STEEL BRICK FORM.

CURB @ 3' O.C.

4" WIDE WHITE

- 4" WIDE WHITE STRIPE AT 45" TO

CURB @ 3' O.C.

TYPICAL STRIPED

PARKING ISLAND

SEE PLANS FOR SITE SPECIFIC LAYOUT OF PAVEMENT STRIPING

2. BRICK AREA TO BE PAINTED WITH "BRICK RED" COLOR PAINT.

**TYPICAL** 

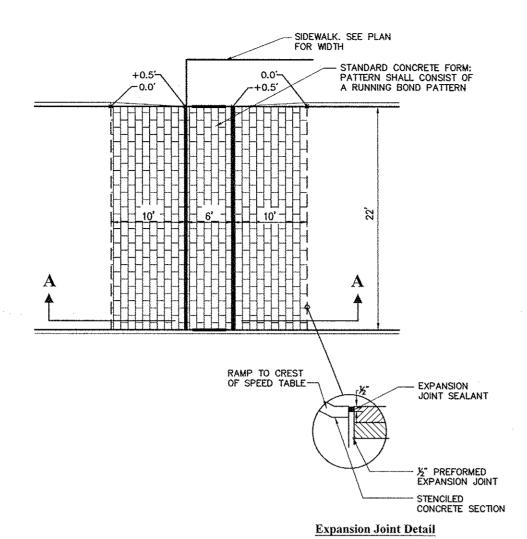
PAVEMENT

**STRIPING** 

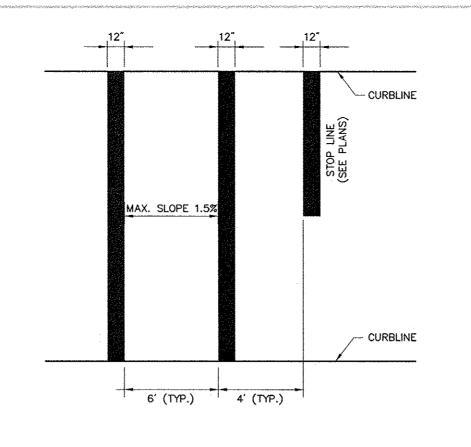
N.T.S.

**Pavement Striping Within Parking Lot** 

**Speed Table Detail (Section A-A)** 



Speed Table Detail & Stamped Brick Crosswalk



1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO  $-\ 6$ INCH LINES) WILL BE ACCEPTED. 2. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.

Crosswalk at Site Driveways N.T.S. REV LD\_553s Source: VHB

CAP —

MODULAR CONCRETE FACING UNITS

- PROVIDE FENCE WHERE WALL HEIGHT EXCEEDS 4 FEET

APPROXIMATE

EXCAVATION

- GEOSYNTHETIC REINFORCEMENT

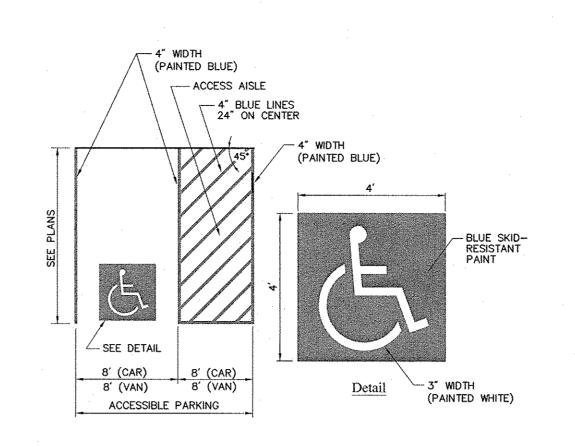
--- GRAVEL

- UNDERDRAIN

LEVELING PAD

COMPACTED SUBGRADE

(SLOPE TO DRAIN)

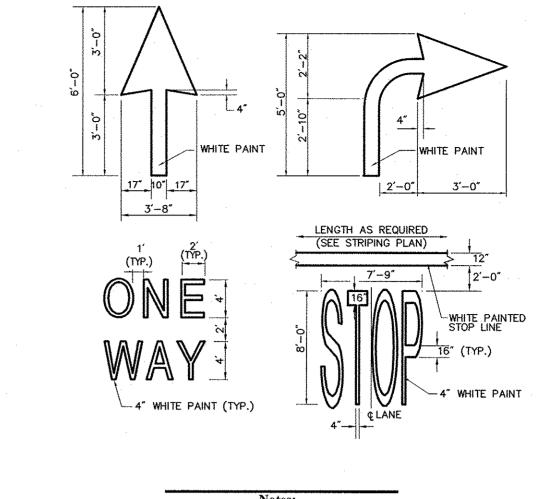


1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.

2. 8' STALL WIDTH REFERS TO 8' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.

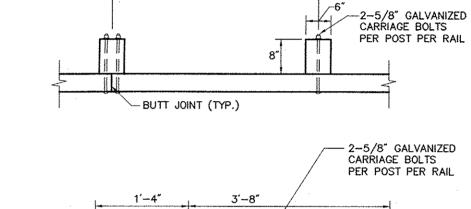
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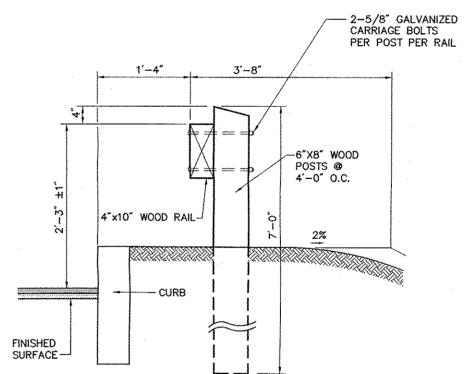
**Accessible Parking Space** 



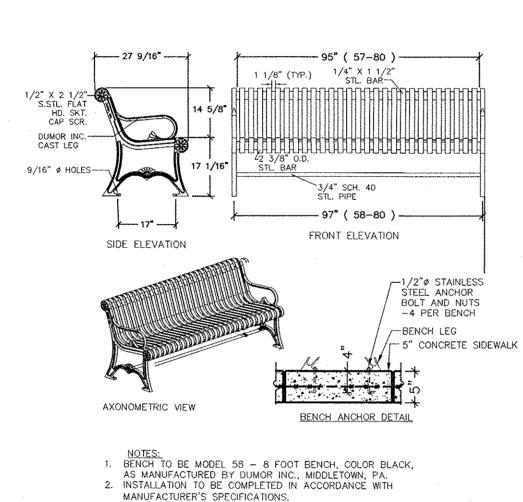
1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON SITE WORK IN LOCATIONS SHOWN.

Painted Pavement Markings - On Site N.T.S.





Wood Guardrail 6/08 N.T.S. Source: VHB



4. ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN

Source: Dumor Inc

FINISHED W/ POLYESTER COATING (COLOR TO BE BLACK).

**Street Bench Detail** 

N.T.S.

N.T.S.

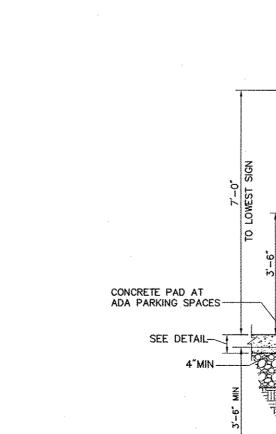
Modular Retaining Wall N.T.S. LD\_750 Source: VHB

DETAIL PROVIDED FOR GENERAL INFORMATION ONLY.
STAMPED FINAL DESIGN OF MODULAR WALL SYSTEM
TO BE PROVIDED BY WALL MANUFACTURER BASED ON

GEOTECHNICAL ENGINEERS RECOMMENDATIONS.

- CAP STEEL PIPE POST

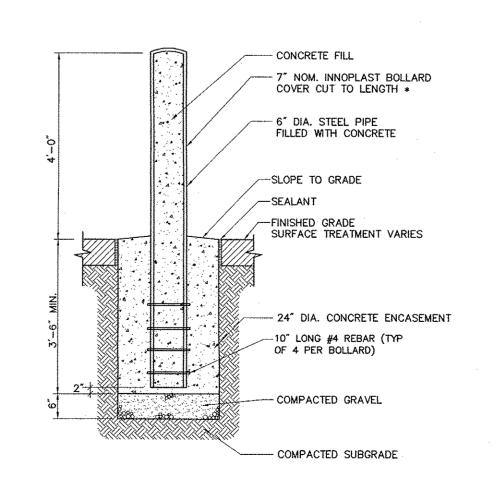
REV LD\_701



N.T.S.

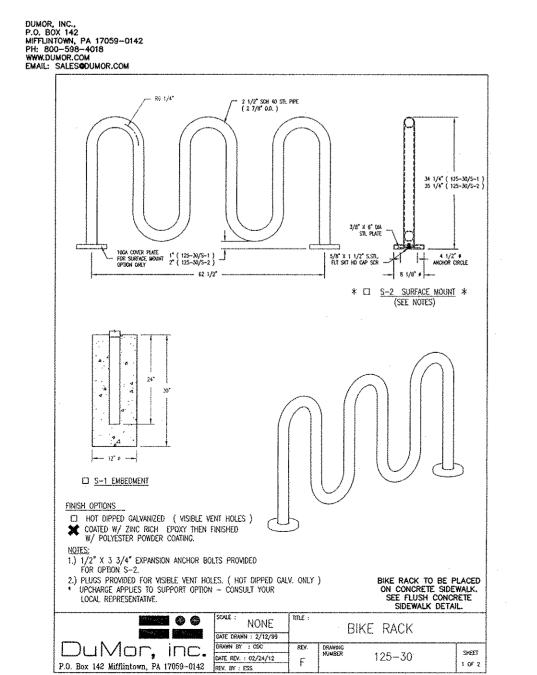
Wood Guardrail - Tapered End

CAP STEEL PIPE POST ADA SIGN TO FACE PARKING STALLS, SEE SIGN CHART - 2½" DIA. GALVANIZED STEEL POST SET IN CONCRETE 5" STEEL PIPE BOLLARD (TILL WITH NON-SHRINK GROUT, ROUND TOP) WITH BLUE PLASTIC BOLLARD -PREMOLDED EXPANSION JOINT MATERIAL -BUILDING SIDEWALK -10" LONG #4 REBAR (TYP OF 4 PER BOLLARD) CONCRETE FOOTING

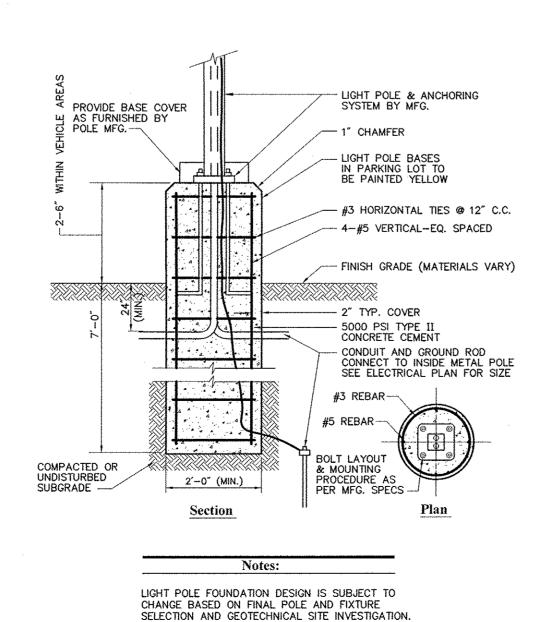


\* FOR BOLLARD MOUNTED SIGN AT ADA PARKING SPACES, SEE DETAIL

**Bollard- with polymer cover** N.T.S. Source: VHB

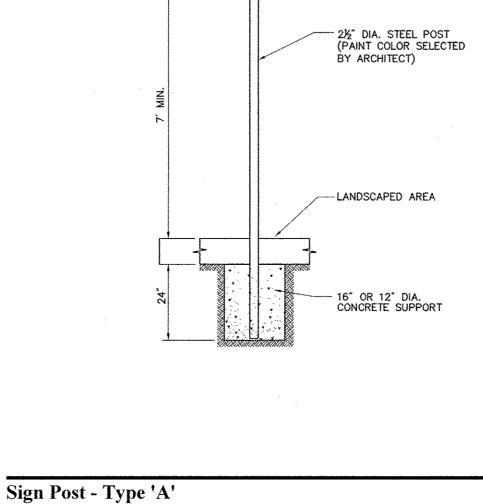


Source: VHB



Light Pole Foundation Detail (Up to 40' Pole)

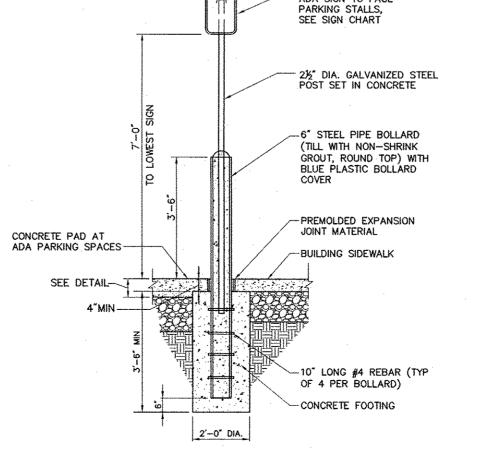
Source: VHB



Source: VHB

N.T.S.

REV LD\_310

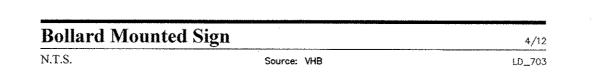


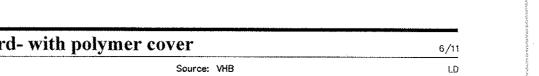
11

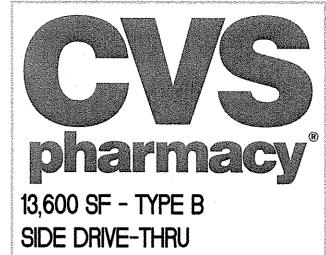
11 1 | | |

6/08

LD\_451







STORE NUMBER: 10688 SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NÈWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE

CS PROJECT NUMBER:





Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606 914.467.6600 100 Great Meadow Road

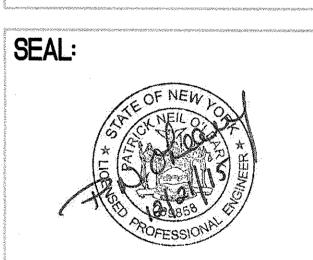
Suite 200 Wethersfield, CT 06109 860.807.4300

#### **DEVELOPER**:

FAX (401) 721-1601

#### T.M.CROWLEY

& ASSOCIATES T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607

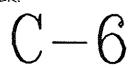


| REVISIONS: |  |
|------------|--|

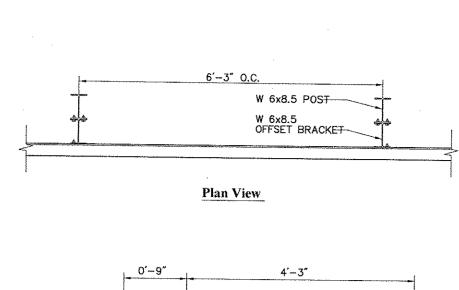
| 12/17/15   |
|--|
| 11/23/15   |
| entre respective experimental contractive depuils in the productive respective experimental productive respective experimental contractive experimental experimen |
| amenormonoro-cuposicionis cuntante pro considera cure cultura de la AEF  |
| mi samenani in masa ini masa samenani sama samenani ping pama samenani milina di<br>MR G   |
| October 19, 2015   |
| 41847.44   |
| જી જાત કરવાલા માત્ર જાતના માત્ર કરિયાન મહિલ અગાવી લોકો મહિલા હતા. અને પાકિસ ભાગોની અન્યને અને દર જાણાકીને આ કોન  |
|  |

Site Details 1

SHEET NUMBER:



NOT ISSUED FOR CONSTRUCTION 06\_41847.44\_DT.DWG

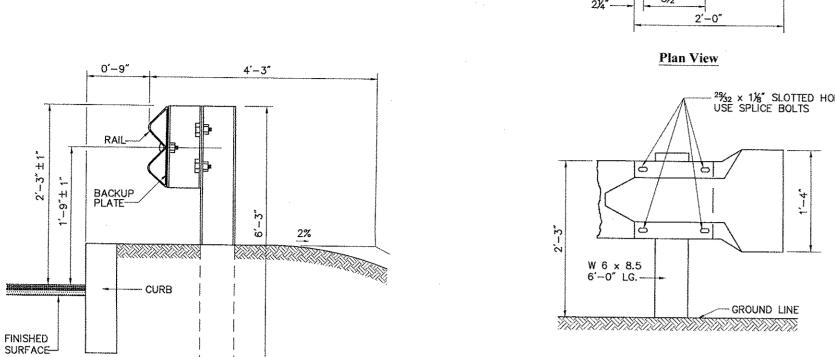


Section View

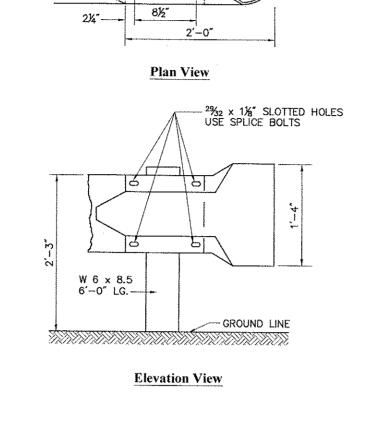
**Steel Beam Guardrail with Steel Post** 

N.T.S.

 $\verb|\vhb|proj|\Wethersfield|4|847.44|cad||d||Planset||06_4|847.44_DT.dwq|$ 

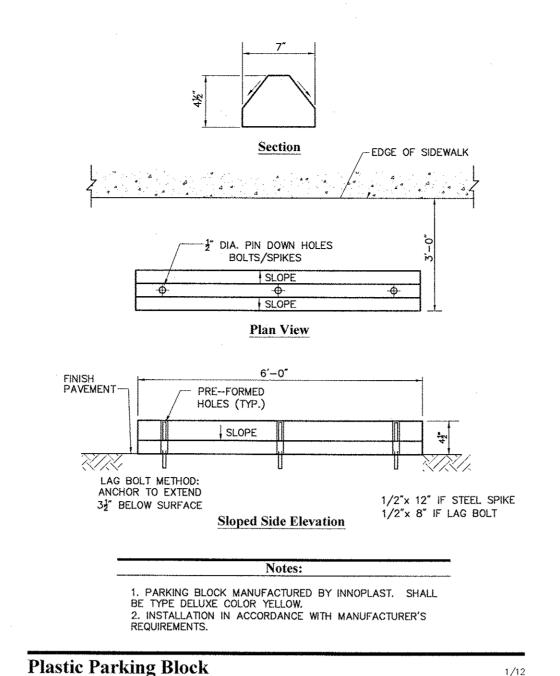


Source: VHB



W 6x8.5 POST

F-3-70 BOLT



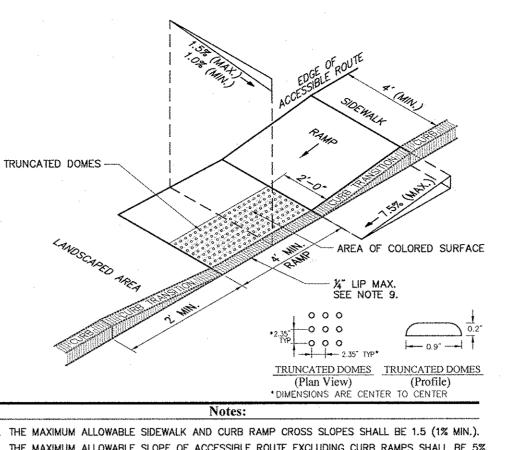
N.T.S.

LD\_456

LD\_426

11/08

REV LD\_XXX



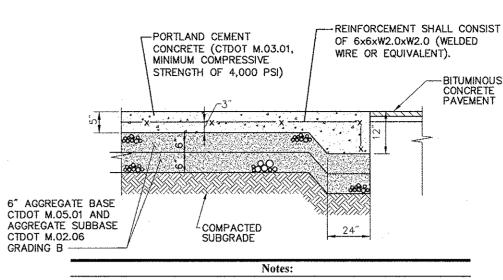
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.). 2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%. 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%. 4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).

5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE. 6. RAMP, CURB, AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING. 7. TYPICAL SIDEWALK SECTION FOR RAMP SECTION CONSTRUCTION.

8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET. 9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.

10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. 11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'G-D' 11/10 LD\_506



1. MATERIAL IS BASED ON THE GEOTECHNICAL ENGINEERING REPORT TITLED "GEOTECHNICAL ENGINEERING REPORT PROPOSED CVS PHARMACY/ STORE NO. 5359, 7568 NORTH BROADWAY REDHOOK, NY" BY RANSOM CONSULTING, INC. DATED MARCH 15, 2013 AND ARE SUBJECT TO CHANGE BASED ON FURTHER GEOTECHNICAL REVIEW, INVESTIGATION, AND/OR RECOMMENDATIONS.

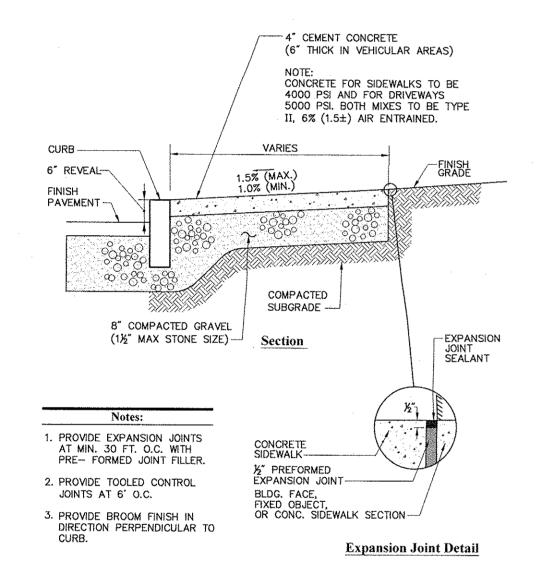
2. SIZE OF PAD TO BE AS INDICATED ON PLANS.

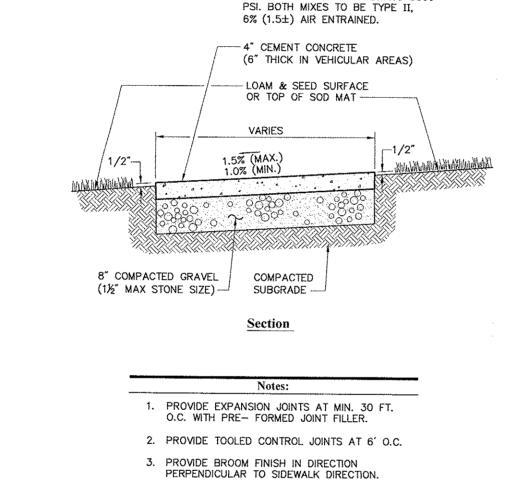
3. CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 10-12 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

4. DOWELS SHALL BE PLACES ACROSS SLAB EXPANSION JOINTS TO LIMIT DIFFERENTIAL SETTLEMENT

5. COMPONENTS SHALL MEET THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (CTDOT) STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION FORM 816

Concrete Pad at ADA Parking Spaces & Striping, and at Drive-Thru





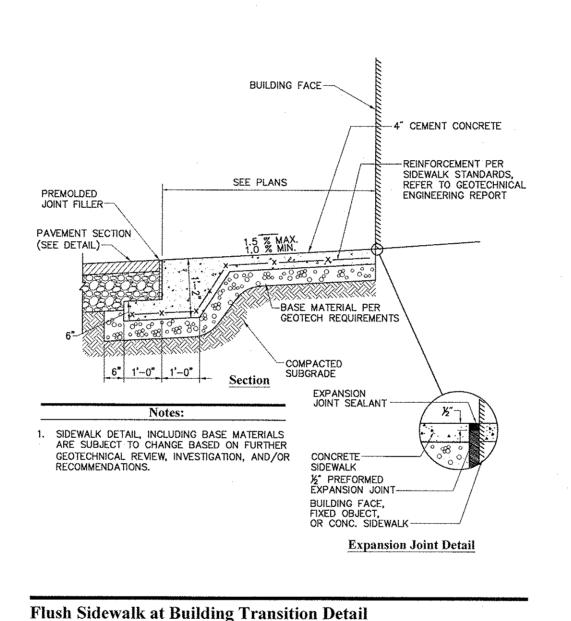
Source: VHB

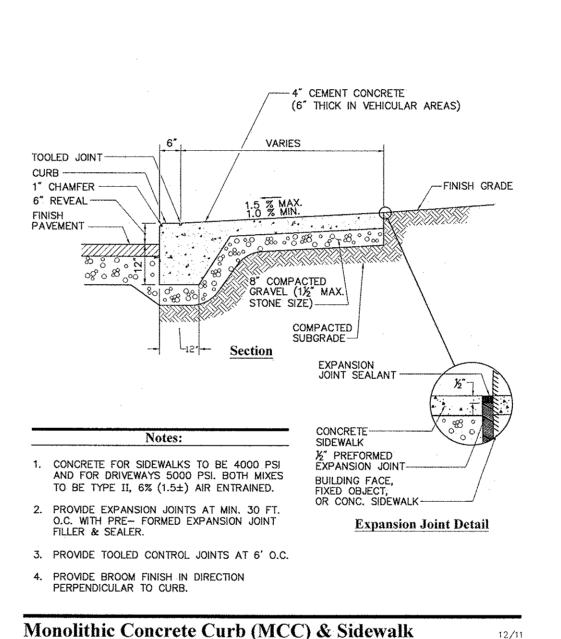
Source: SPECRAIL

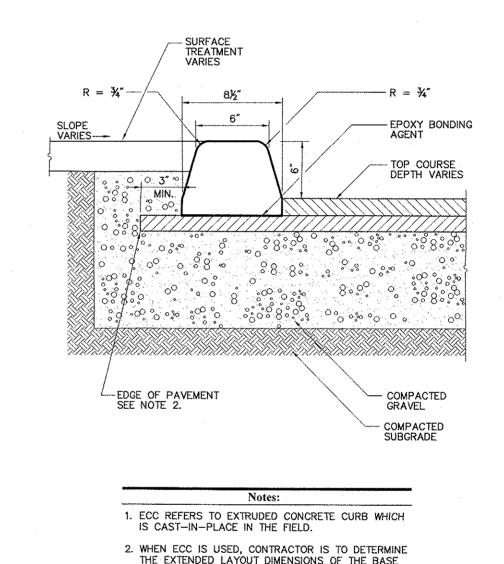
Concrete Sidewalk in Landscape Area

N.T.S.

CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000



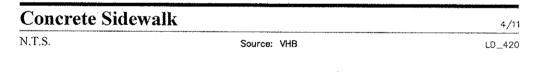




|            | COURSE IN ORDER TO ACCOMODATE PLACEMEN THE ECC. |     |
|------------|---|-----|
|            |   |     |
| Extruded C | Concrete Curb (ECC)                             | 12/ |

Source: VHB

LD\_408



TOP RAIL

SELVAGE OF FABRIC KNUCKLED TOP & BOTTOM-

Elevation

TOP RAIL-

BLACK VINYL FENCE FABRIC-

LINE POSTS -

1" BEVEL---

CORNER, END OR

TENSION WIRE-

FINISH GRADE -

, CONCRETE FOOTING

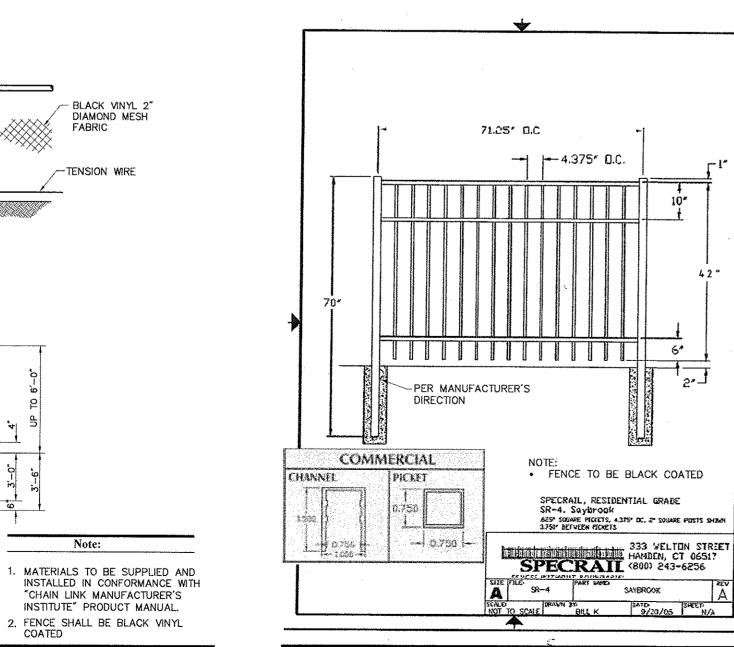
(3000 PSI-TYPE I) -

10" DIA. @ LINE POSTS OR 1'-4" @ CORNER,

PULL OR END POSTS-

Chain Link Fence up to 6'

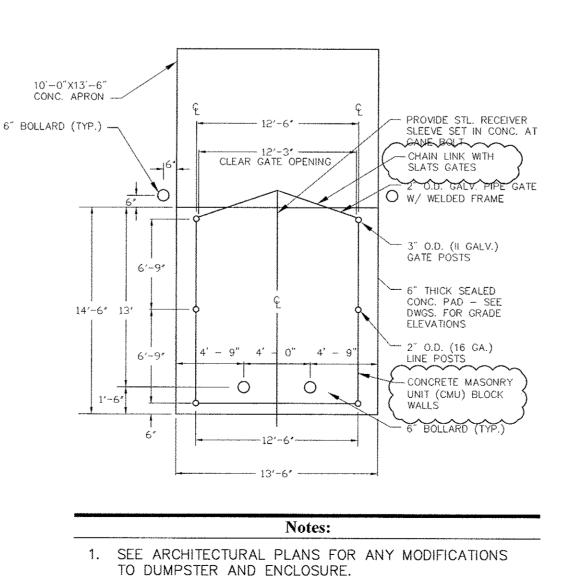
N.T.S.



4' Decorative Fence

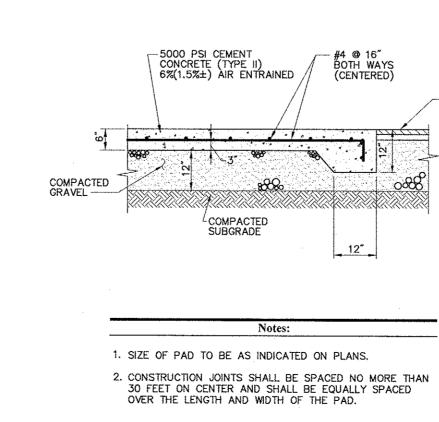
6/08

REV LD\_481



**Dumpster Pad Layout Detail** 

Source: CVS



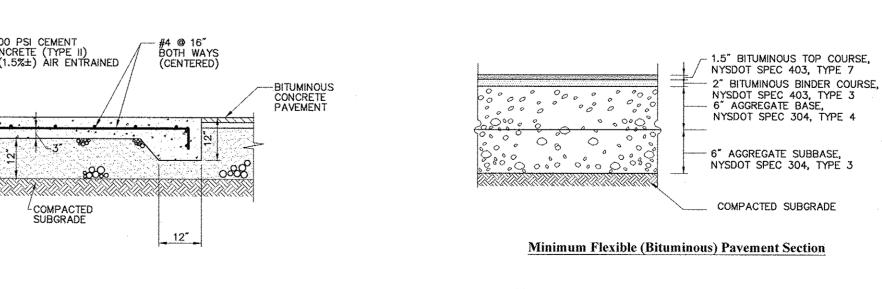
N.T.S.

11/10

LD\_552

Dumpster Pad

N.T.S.

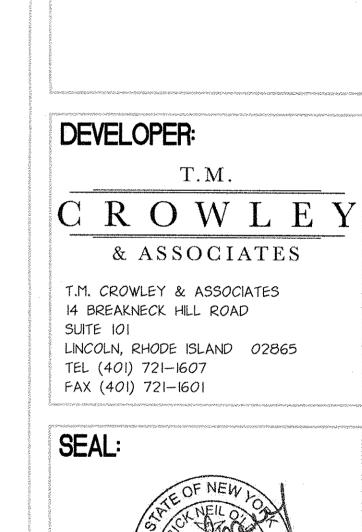


N.T.S.

REV LD\_421

PAVEMENT SECTION IS BASED ON GEOTECHNICAL ENGINEERING REPORT DATED JULY 7, 2015 BY RANSOM CONSULTING, INC., AND IS SUBJECT TO CHANGE BASED ON FURTHER GEOTECHNICAL REVIEW, INVESTIGATION AND/OR RECOMMENDATIONS ALL PAVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT NYSDOT STANDARD SPECIFICATIONS, 2008.

| Bituminous | s Concret | te Pavement Sections | 12/1   |
|------------|-----------|----------------------|--------|
| N.T.S.     |           | Source: VHB          | LD 430 |



**REVISIONS:** 

2 PER TOWN COMMENTS

1 PER TOWN COMMENTS

PROJECT MANAGER:

PLANNING ENGINEER:

REVIEWED BY:

JOB NUMBER:

SHEET NUMBER:

COMMENTS:

Site Details 2

NOT ISSUED FOR CONSTRUCTION

06\_41847.44\_DT:DWG

DATE:

TITLE:

12/17/15

11/23/15

PNO

MRG

41847.44

AMK / AEF

October 19, 2015

pharmacy

SOUTH PLANK ROAD (RT 52) &

13,600 SF - TYPE B

UNION AVE (RT 300)

TOWN OF NEWBURGH, NY

DEAL TYPE: FEE FOR SERVICE

CS PROJECT NUMBER:

SIDE DRIVE-THRU

STORE NUMBER:

PROJECT TYPE: NEW

Engineering, Surveying 8

50 Main Street

Suite 360

Suite 200

860.807.4300

914.467.6600

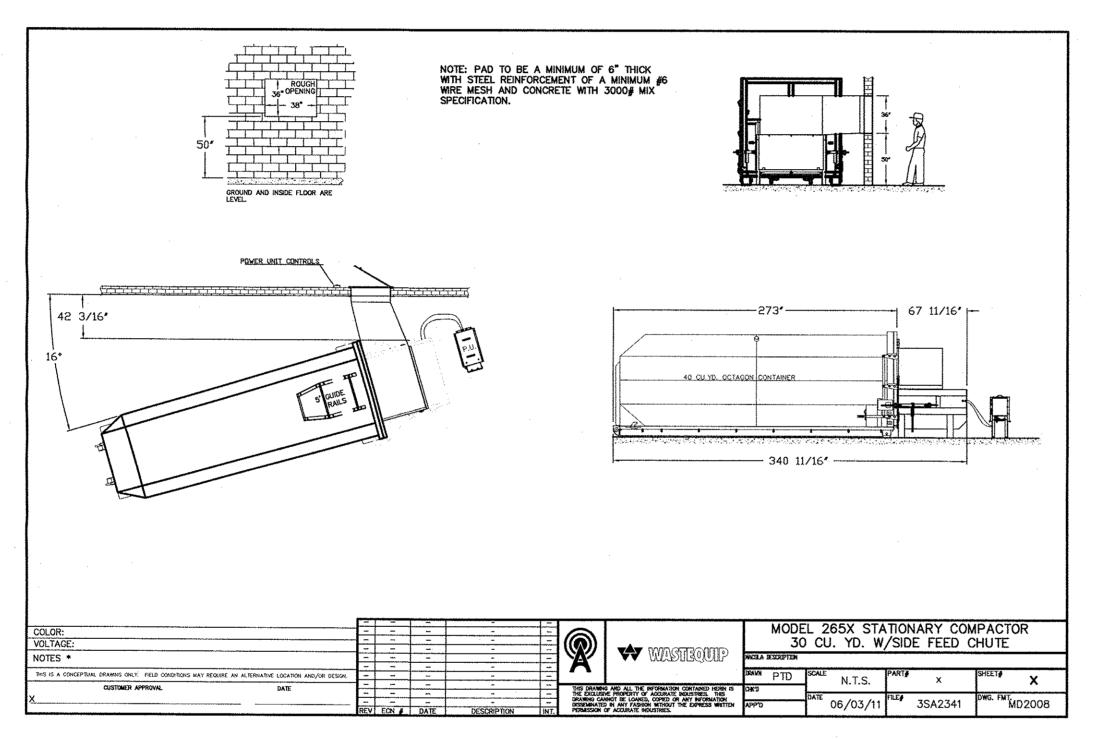
Landscape Architecture, PC

White Plains, NY 10606

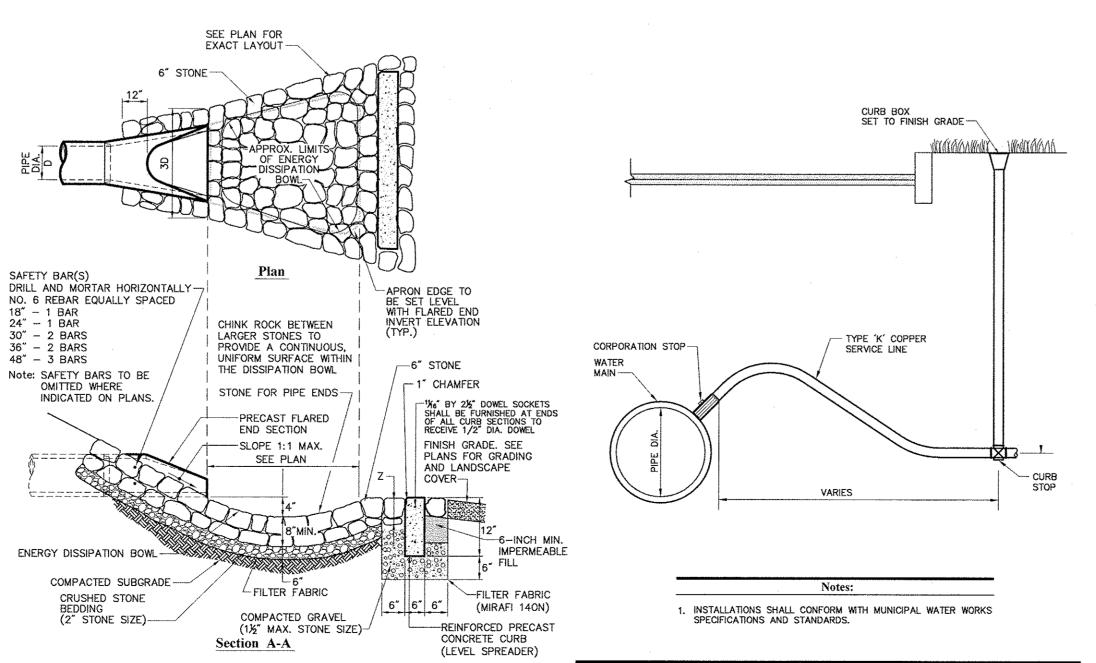
100 Great Meadow Road

Wethersfield, CT 06109

**ENGINEER:** 



\\vhb\proj\\Wethersfield\41847.44\cad\ld\Planset\06\_41847.44\_DT.dwg



N.T.S.

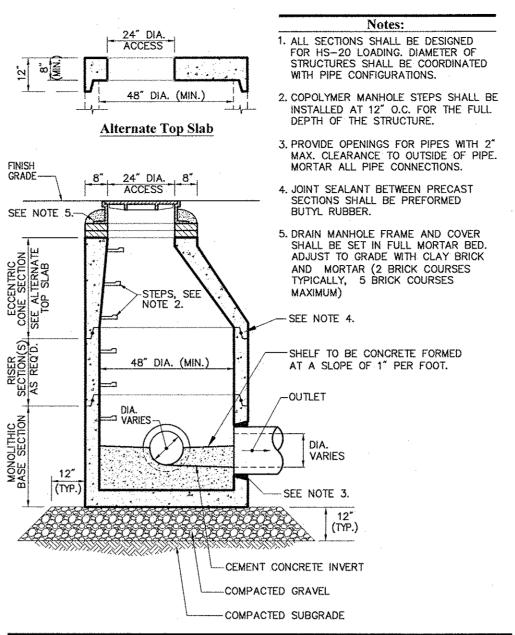
Corporation/Curb Stop with Box

Source: VHB

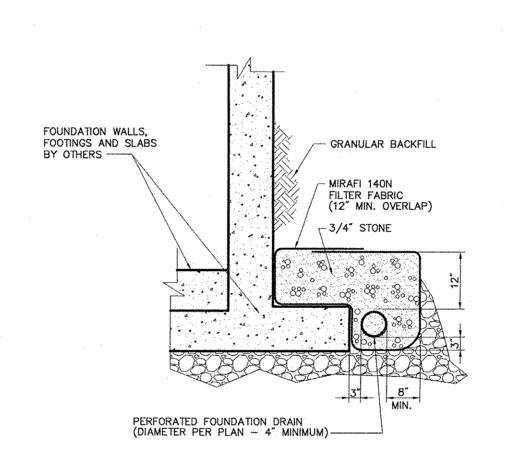
6/08

LD\_256

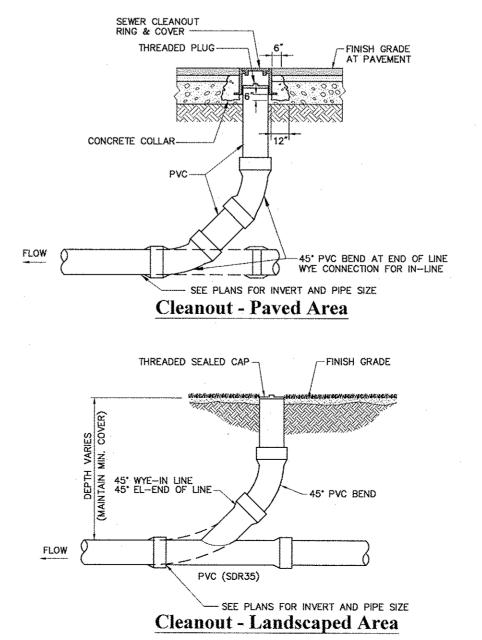
N.T.S.

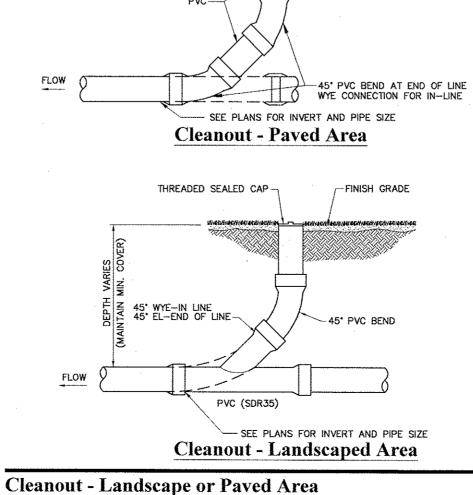


Drain Manhole (DMH) 4/11 N.T.S. LD\_115 Source: VHB



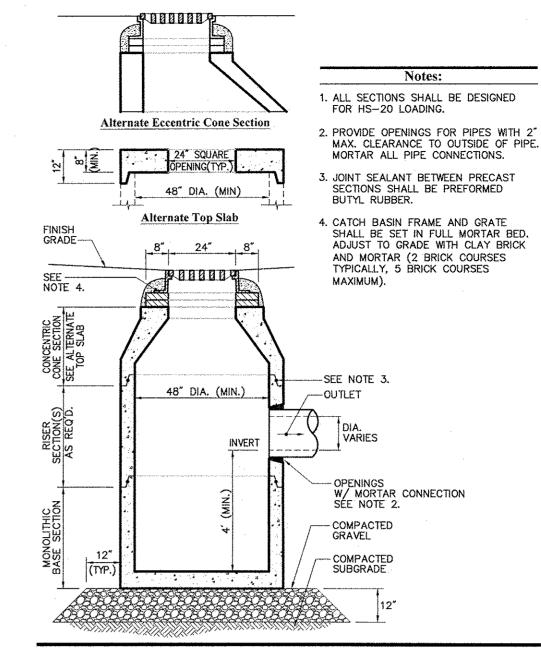
**Foundation Drain** 6/08 N.T.S. Source: VHB LD\_196

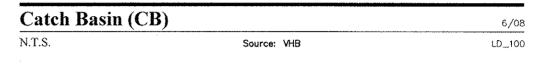


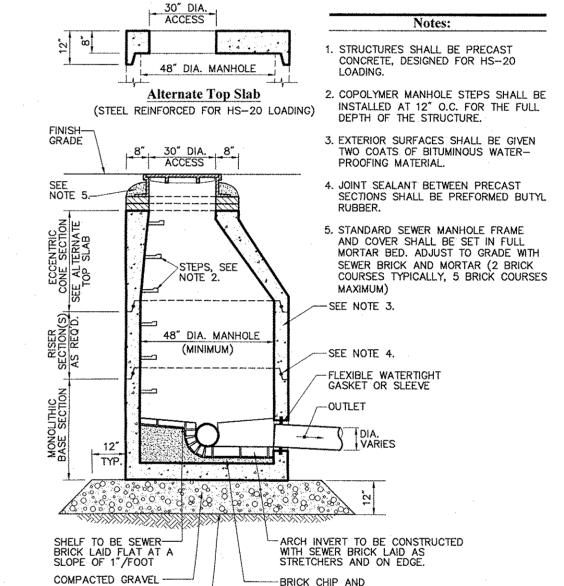


6/08

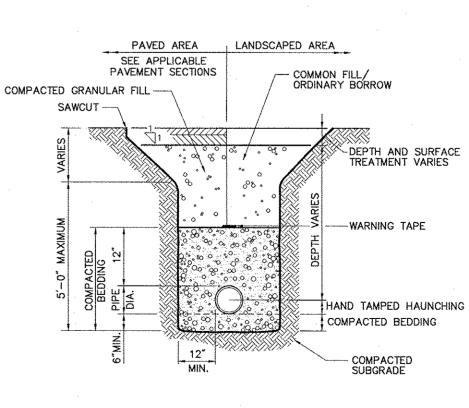
LD\_302







-BRICK CHIP AND MORTAR OR CEMENT CONCRETE FILL COMPACTED SUBGRADE-Sanitary Sewer Manhole (SMH) 6/08 N.T.S. LD\_200



1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS. 2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.

**Utility Trench** 8/11 N.T.S. Source: VHB LD\_300 pharmacy

13,600 SF - TYPE B SIDE DRIVE-THRU STORE NUMBER:

SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NEWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER:

ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606 914.467.6600

100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

**DEVELOPER**:

Т.М. CROWLEY

& ASSOCIATES

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

SEAL:

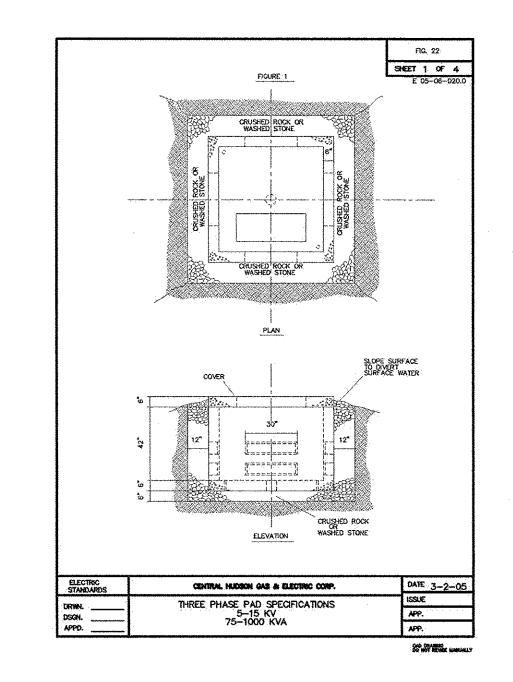


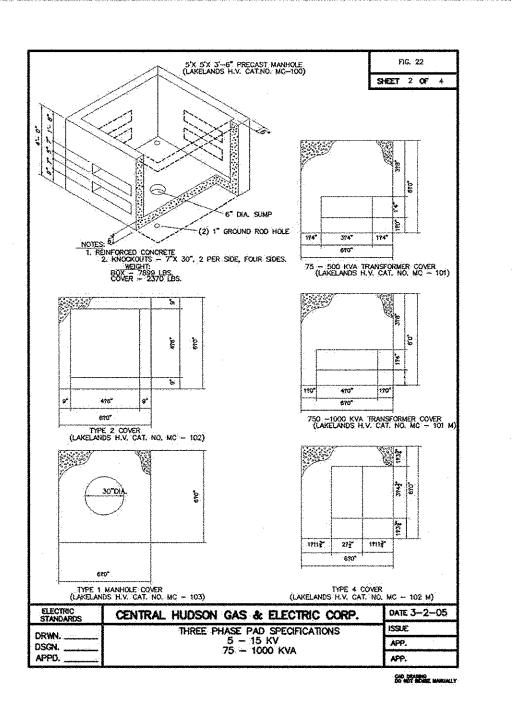
**REVISIONS:** 2 PER TOWN COMMENTS 12/17/15 11/23/15 1 PER TOWN COMMENTS PROJECT MANAGER: PNO PLANNING ENGINEER: AMK / AEF REVIEWED BY: MRG DATE: October 19, 2015 JOB NUMBER: 41847.44 TITLE:

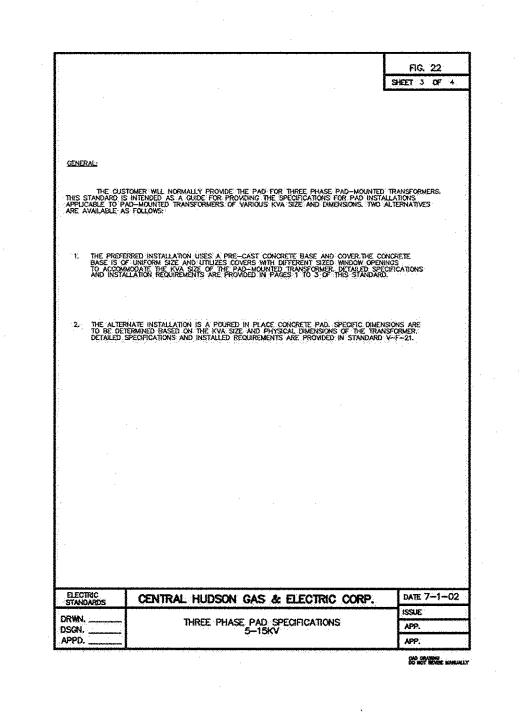
Site Details 3

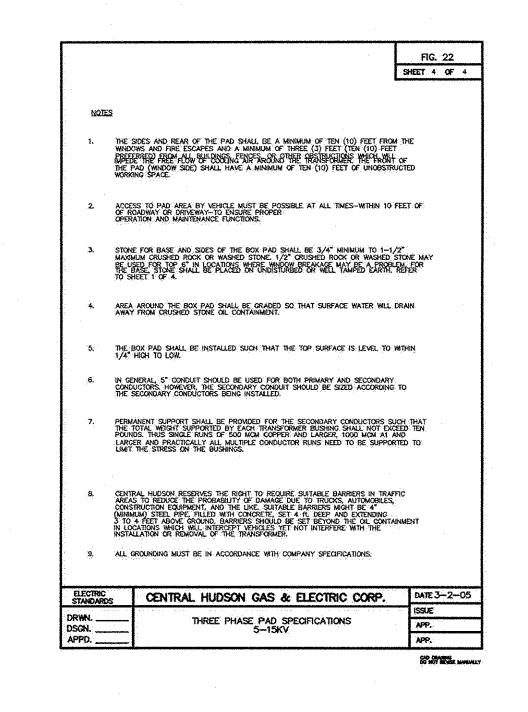
SHEET NUMBER:

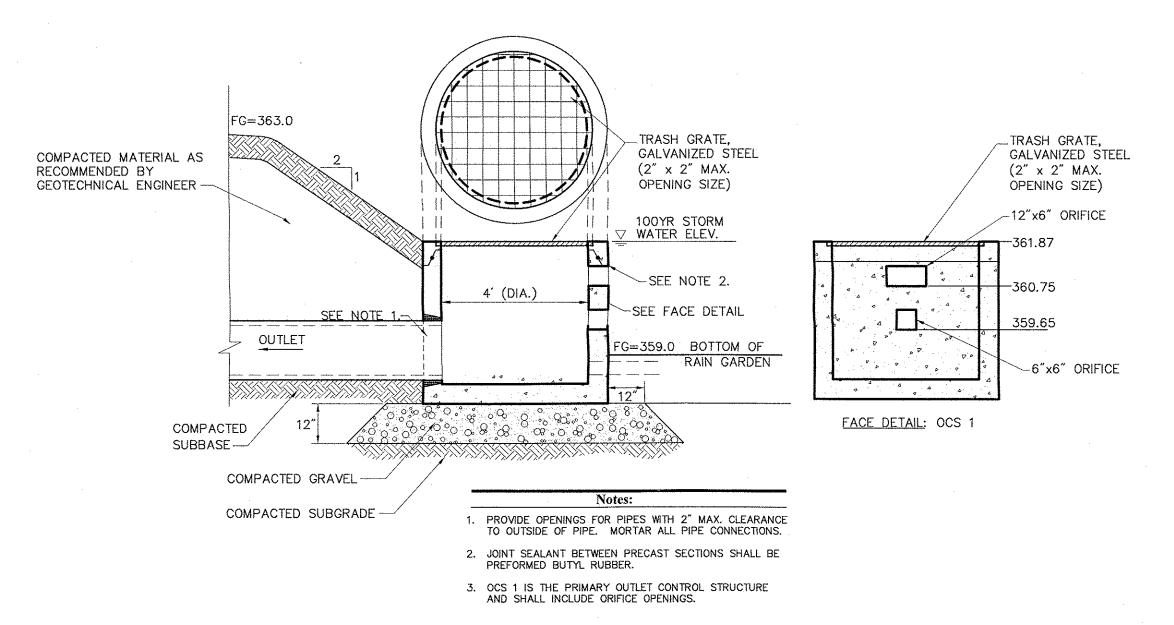
COMMENTS: NOT ISSUED FOR CONSTRUCTION 06\_41847.44\_DT.DWG

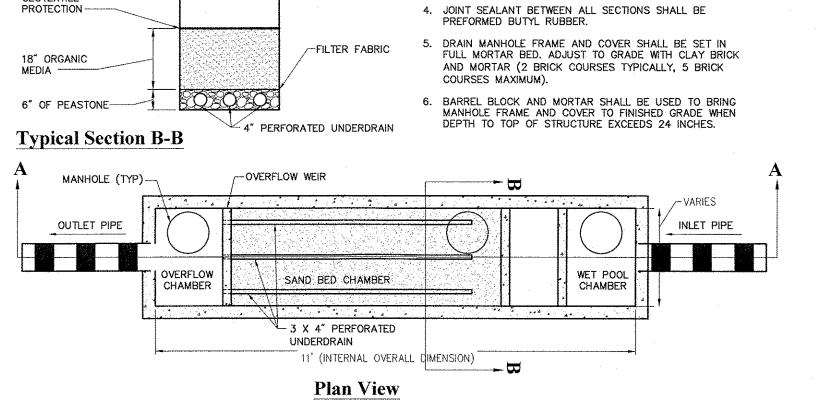












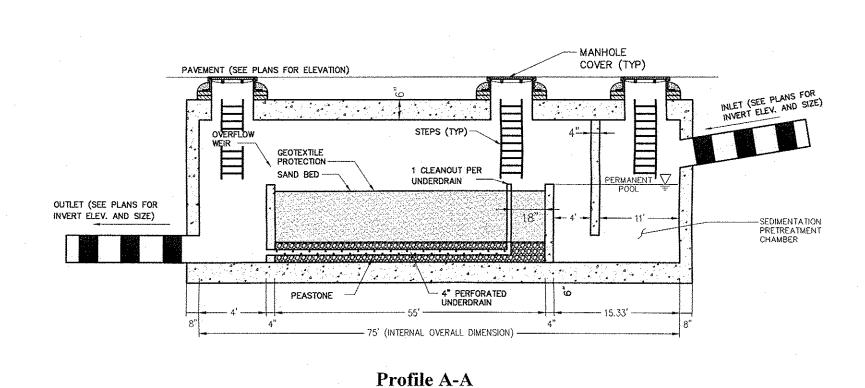
Notes:

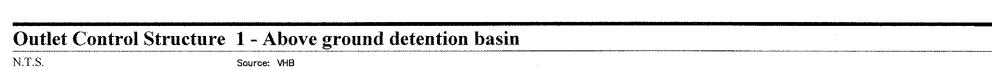
PRECAST BAFFLES AS SHOWN.

1. SAND FILTER CHAMBER SHALL BE A PRECAST TANK WITH

2. STRUCTURES SHALL BE DESIGNED FOR HS-20 LOADING.

3. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.







-TOP OF PLATE

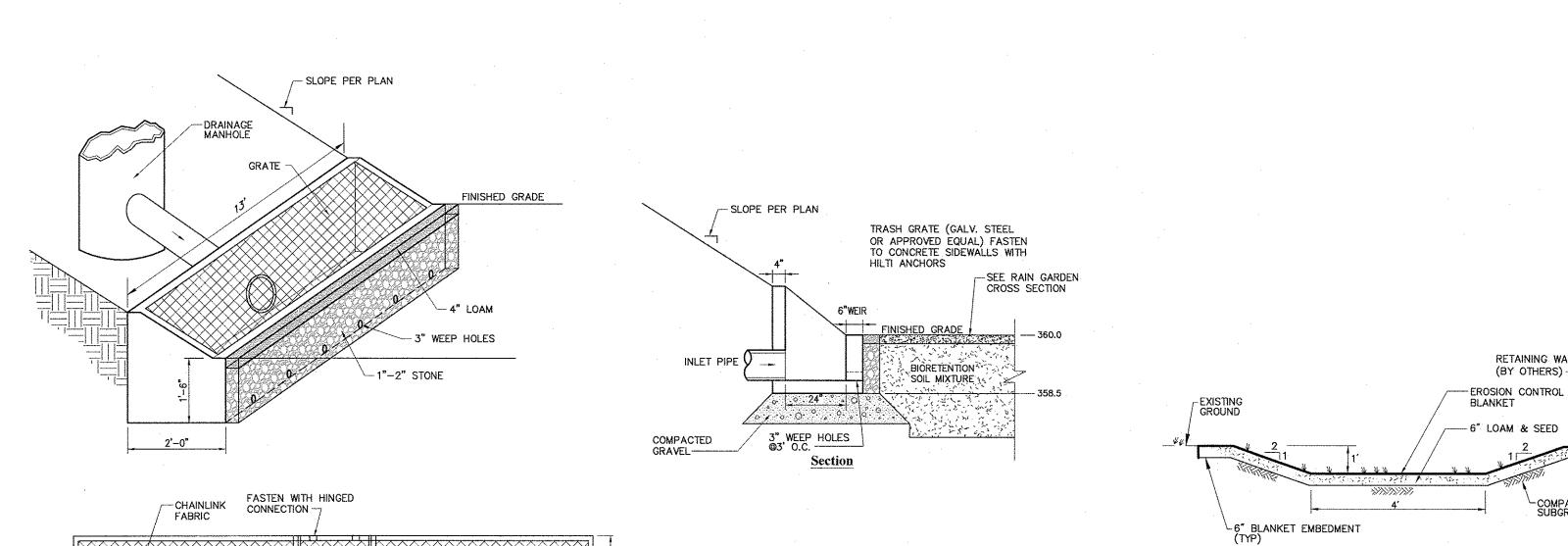
6"x18"
ORIFICE

WEIR PLATE DETAIL

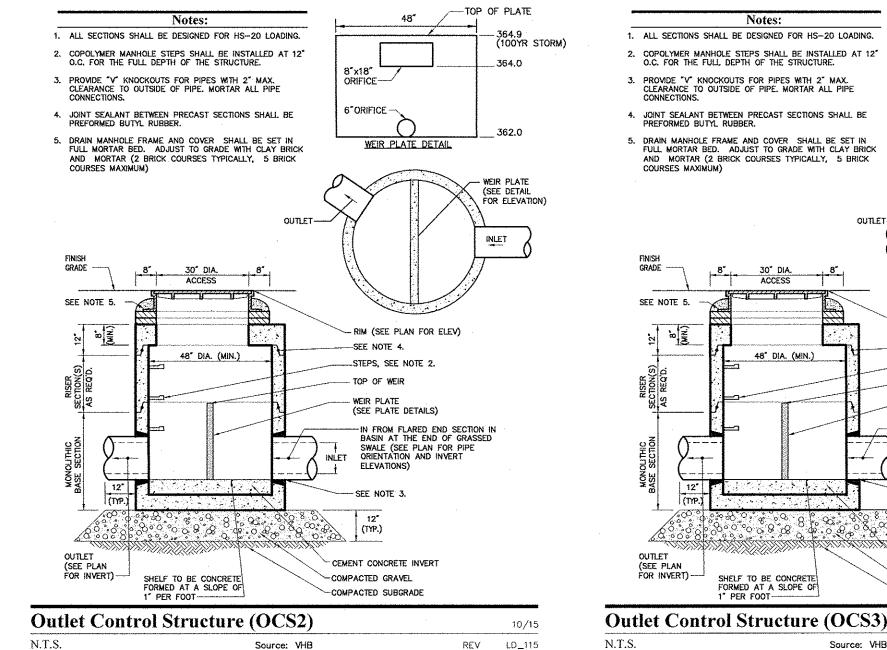
6"ORIFICE -

-369,76 (100YR STORM)

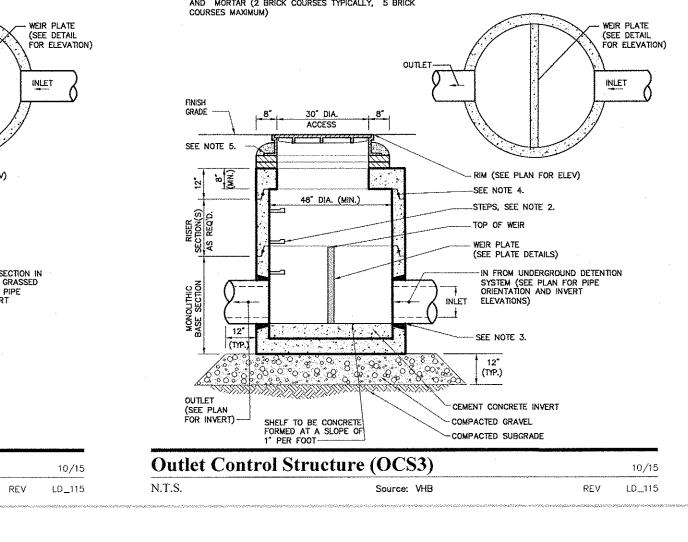
GEOTEXTILE



VHB



Source: VHB



HASP AND LOCK Precast Concrete Level Spreader

**Grassed Swale** 6/08 N.T.S. Source: VHB REV LD\_171

RETAINING WALL

(BY OTHERS) -

pharmacy 13,600 SF - TYPE B

SIDE DRIVE-THRU STORE NUMBER:

SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NEWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER:

#### **ENGINEER:**



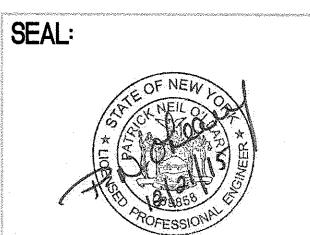
Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606 914.467.6600 100 Great Meadow Road Suite 200 Wethersfield, CT 06109

860.807.4300

#### **DEVELOPER:**

T.M.CROWLEY & ASSOCIATES

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601



**REVISIONS:** 

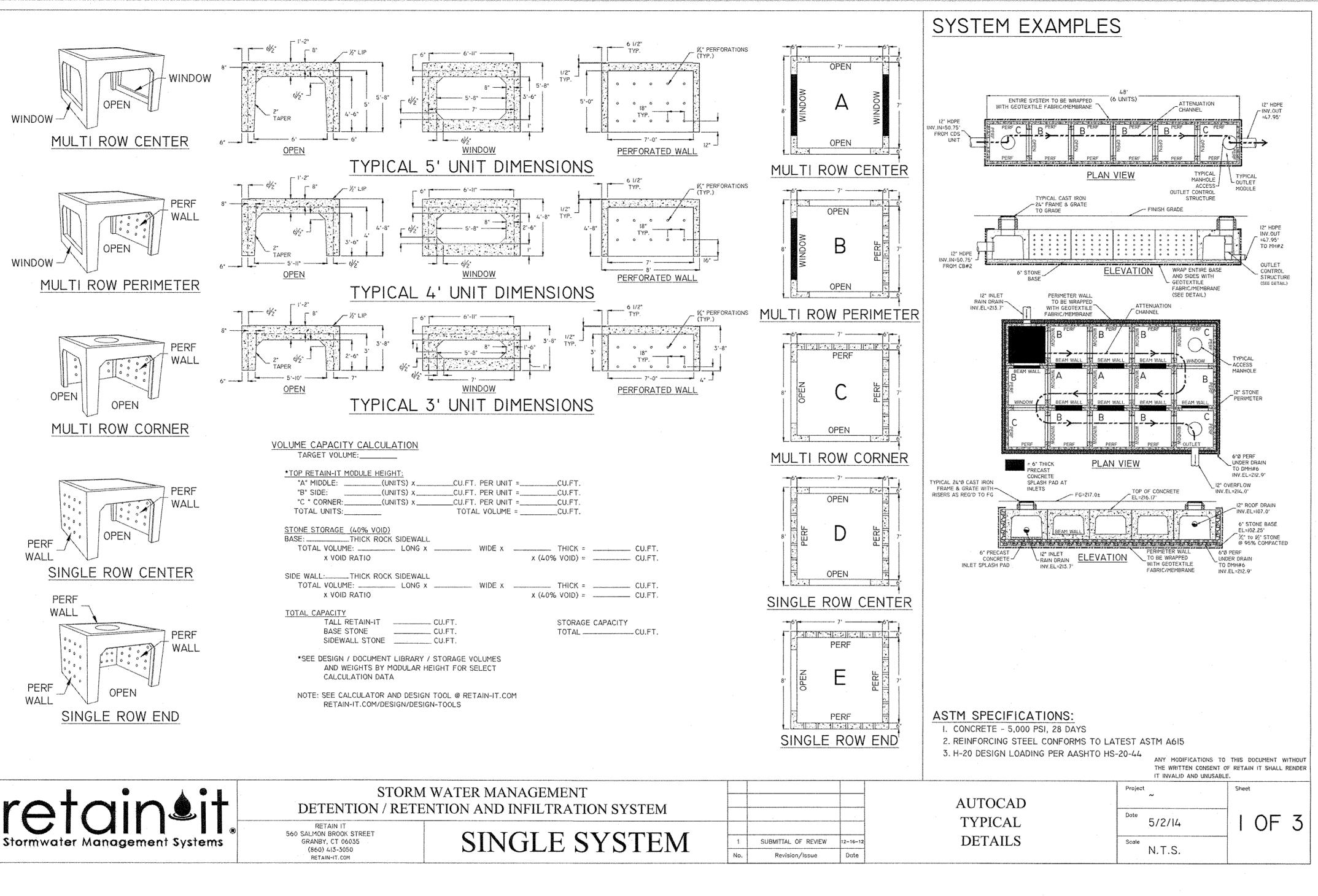
| 1 PER TOWN COMMENTS 11/23/15  PROJECT MANAGER:  PLANNING ENGINEER: AMK / | MR   |
|--|------|
| 1 PER TOWN COMMENTS 11/23/15 PROJECT MANAGER:                            | / AE |
| 12/17/10   | PN   |
| 4 7 ET TOTH COMMENTS   |      |
| 2 PER TOWN COMMENTS 12/17/15   |      |

Site Details 4

SHEET NUMBER:

COMMENTS:

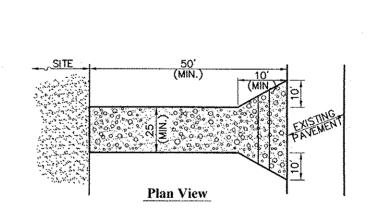
NOT ISSUED FOR CONSTRUCTION 06\_41847.44\_DT.DWG

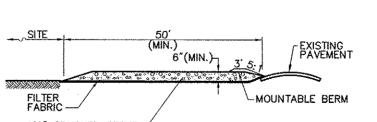


GRASSED INFILTRATION BASIN \±4FT (SEE PLANS) RAIN GARDEN 4" PVC PERFORATED COMPACTED EARTH BERM (ONLY COMPACT BERM, DO NOT COMPACT BOTTOM OF RAIN GARDEN OR GRASSED UNDERDRAIN (SEE RAIN GARDEN SECTION DETAIL) INFILTRATION BASIN) -

**Rain Garden Overflow** 

Source: VHB





WHERE INGRESS OR EGRESS OCCURS. 2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED

3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR

PROVIDED AS NEEDED.

**Stabilized Construction Exit** N.T.S. Source: VHB

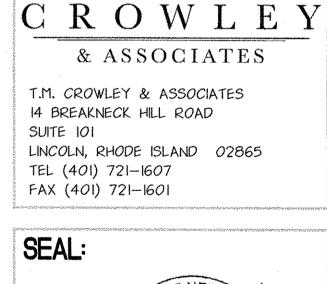
11/2" CRUSHED STONE-

Cross-section

1. ENTRANCE WIDTH SHALL BE A TWENTY—FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS

OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE

REV N.T.S.



T.M.

13,600 SF - TYPE B

SOUTH PLANK ROAD (RT 52) &

SIDE DRIVE-THRU

UNION AVE (RT 300)

PROJECT TYPE: NEW

Engineering, Surveying 8 Landscape Architecture, PC

White Plains, NY 10606

100 Great Meadow Road

Wethersfield, CT 06109

50 Main Street

914.467.6600

Suite 360

Suite 200

860.807.4300

DEVELOPER:

**ENGINEER:** 

TOWN OF NÈWBURGH, NY

DEAL TYPE: FEE FOR SERVICE

CS PROJECT NUMBER:

STORE NUMBER:



**REVISIONS:** 

2 PER TOWN COMMENTS 12/17/15 1 PER TOWN COMMENTS 11/23/15

PROJECT MANAGER: PNO PLANNING ENGINEER: AMK / AEF MRG REVIEWED BY:

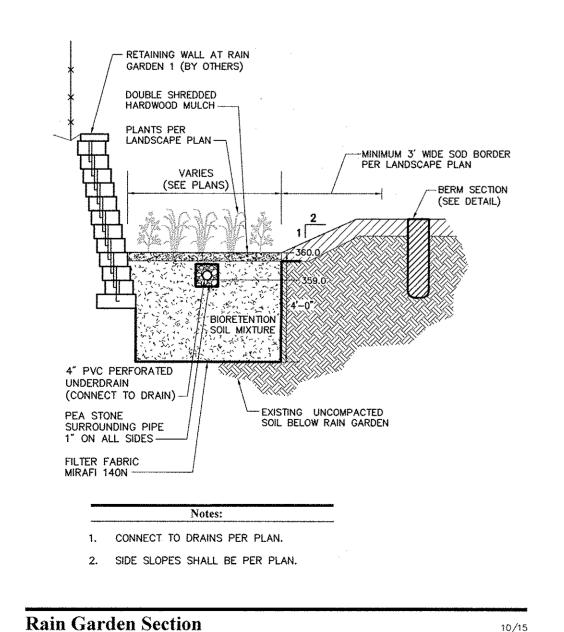
DATE: October 19, 2015

JOB NUMBER: 41847.44 TITLE:

Site Details 5

SHEET NUMBER:

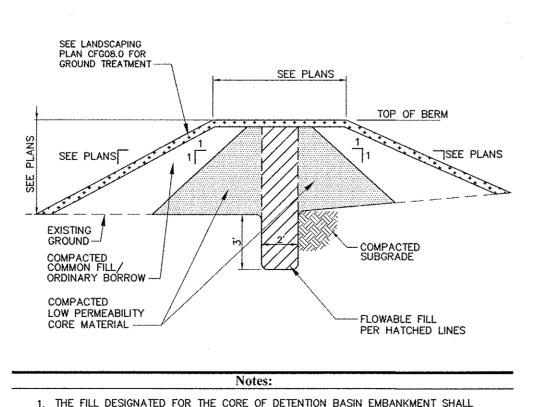
NOT ISSUED FOR CONSTRUCTION 06\_41847.44\_DT.DWG



Source: VHB

N.T.S.

10/15



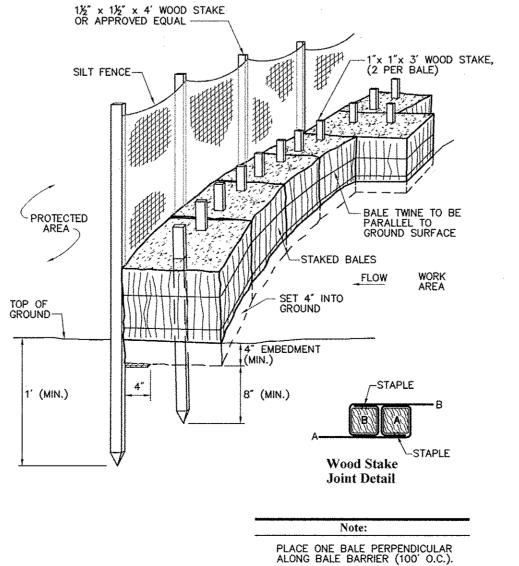
1. THE FILL DESIGNATED FOR THE CORE OF DETENTION BASIN EMBANKMENT SHALL BE LOW PERMEABILITY FILL.

2. THE CORE FILL SHALL BE PLACED AND COMPACTED IN A MANNER TO PROVIDE A IN-SITU PERMEABILITY RATE OF NO MORE THAN 1.0x10-5 CM/SEC

LOW PERMEABILITY CORE MATERIAL AND FLOWABLE FILL IS CONTINUOUS FOR THE FULL LENGTH OF THE EMBANKMENT.

4. THE BERM SECTION IS SUBJECT TO CHANGE AND WILL BE BASED ON THE RESULTS OF FURTHER GEOTECHNICAL INVESTIGATIONS.

Berm Section (for areas of FILL) 10/08 N.T.S. Source: VHB LD\_160



N.T.S.

Plan View CATCH BASIN GRATE-SILTSACK --EXPANSION RESTRAINT Section View . INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS

AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN 2. GRATE TO BE PLACED OVER SILTSACK. 3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM

CATCH BASIN GRATE-

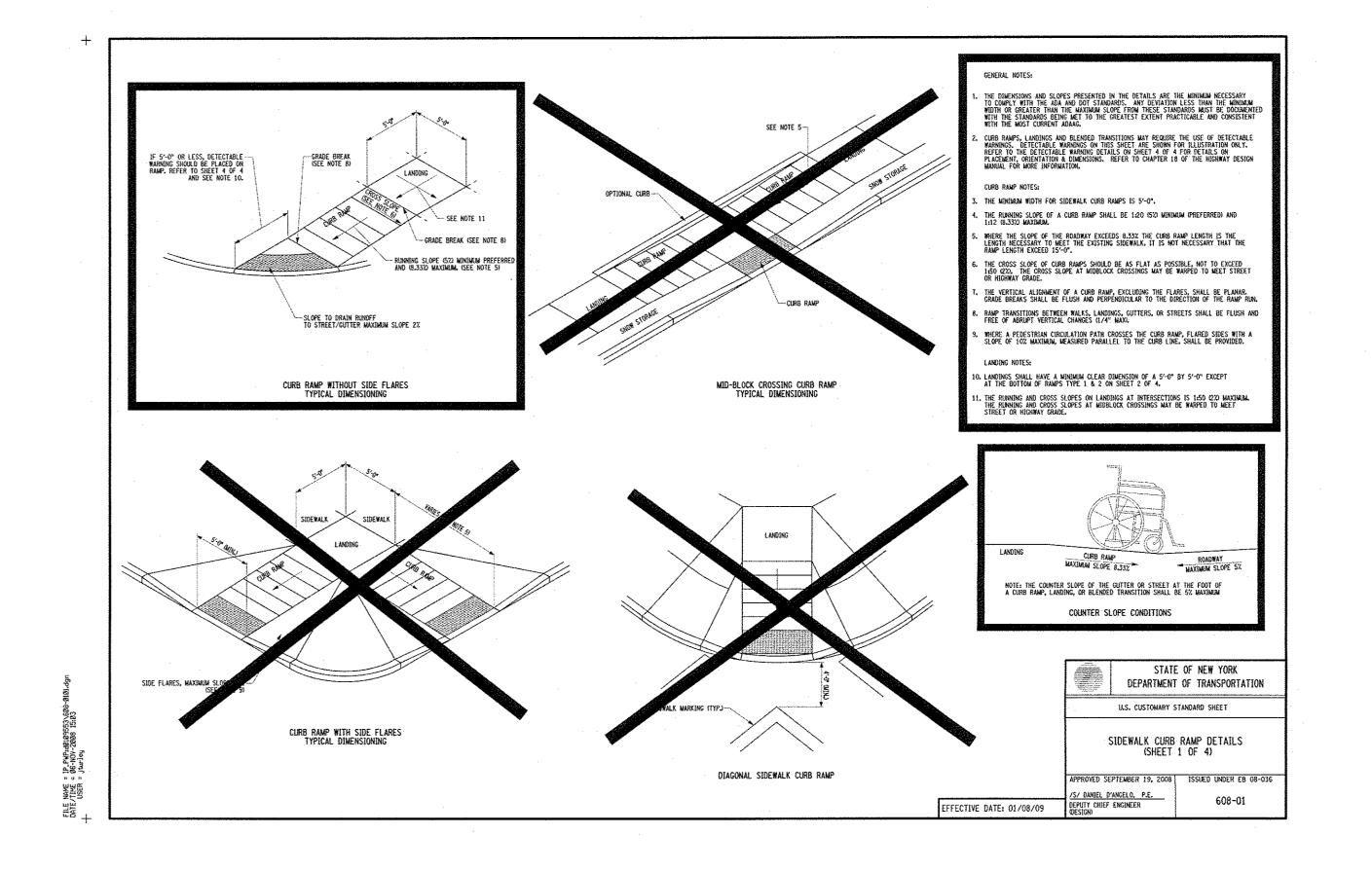
SILTSACK -

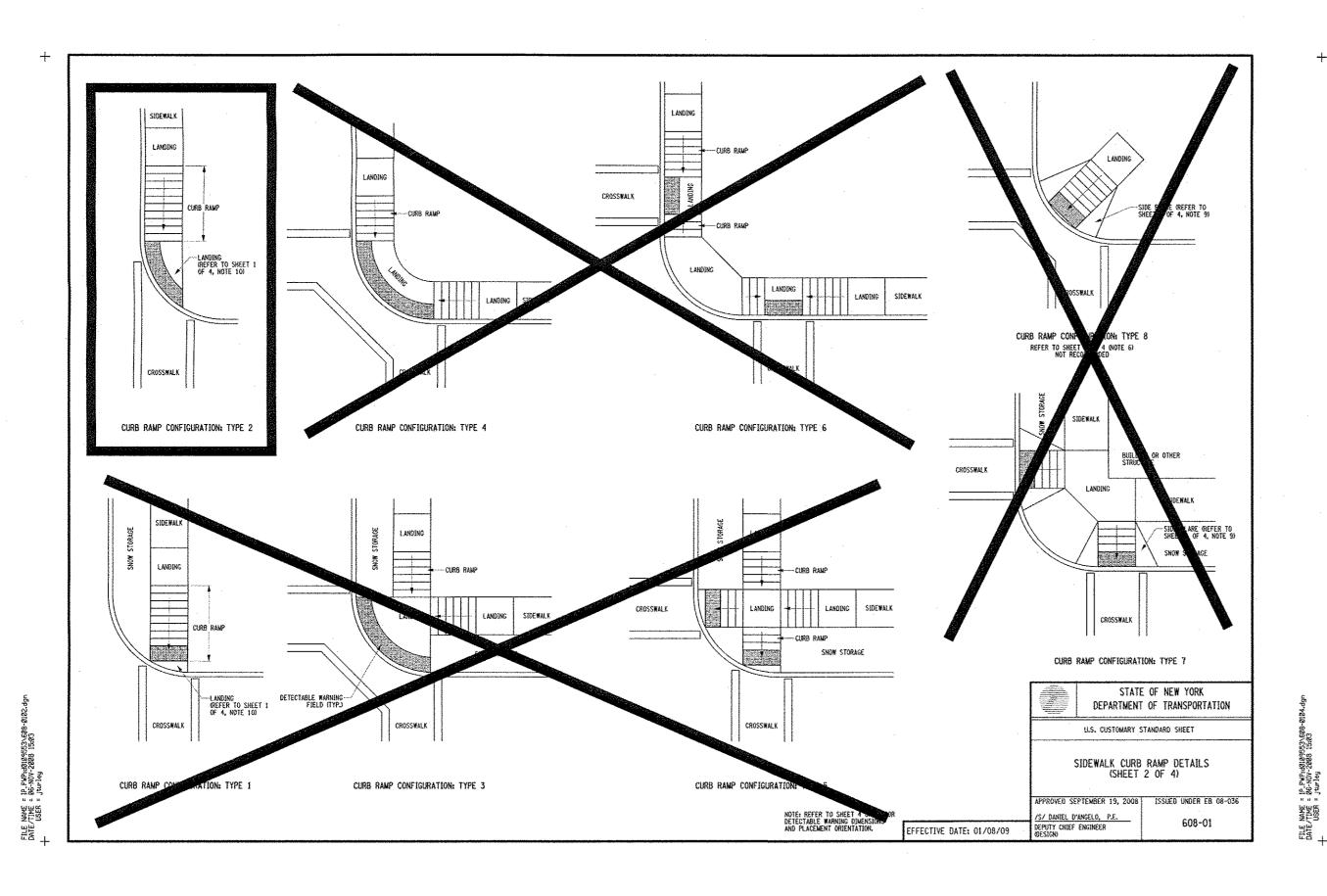
Siltsack Sediment Trap N.T.S. LD\_674

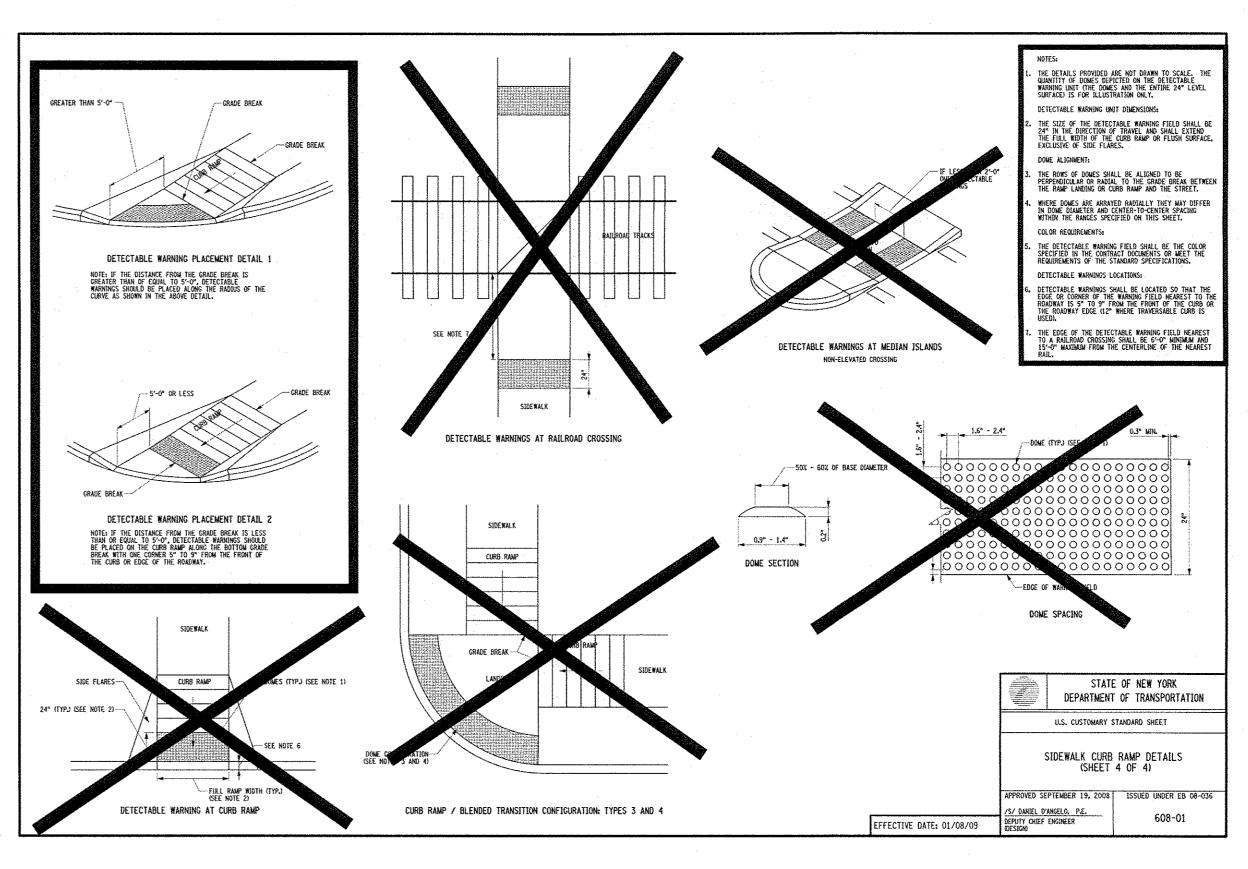
Silt Fence / Straw Bale Barrier (Embedded) LD\_656 Source: VHB

AREAS HAVE BEEN PERMANENTLY STABILIZED

-1" REBAR FOR BAG REMOVAL







Places of the property of the

13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER: 10688
SOUTH PLANK ROAD (RT 52) &
UNION AVE (RT 300)
TOWN OF NEWBURGH, NY
PROJECT TYPE: NEW
DEAL TYPE: FEE FOR SERVICE
CS PROJECT NUMBER: 84094

#### ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street
Suite 360

914.467.6600 100 Great Meadow Road

White Plains, NY 10606

Suite 200 Wethersfield, CT 06109 860.807.4300

#### **DEVELOPER:**

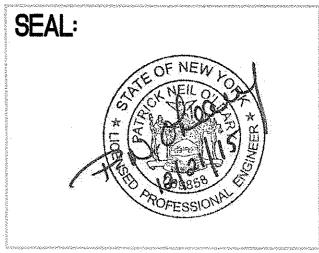
T.M.

#### CROWLEY

& ASSOCIATES

T.M. CROWLEY & ASSOCIATES
14 BREAKNECK HILL ROAD
SUITE 101
LINCOLN, RHODE ISLAND 02865

TEL (401) 721-1607 FAX (401) 721-1601



REVISIONS:

| 2 PER TOWN COMMENTS | 12/17/15         |
|---------------------|------------------|
| 1 PER TOWN COMMENTS | 11/23/15         |
| PROJECT MANAGER:    | PNO              |
| PLANNING ENGINEER:  | AMK / AEF        |
| REVIEWED BY:        | MRG              |
| DATE:               | October 19, 2015 |
| JOB NUMBER:         | 41847.44         |

Site Details 6

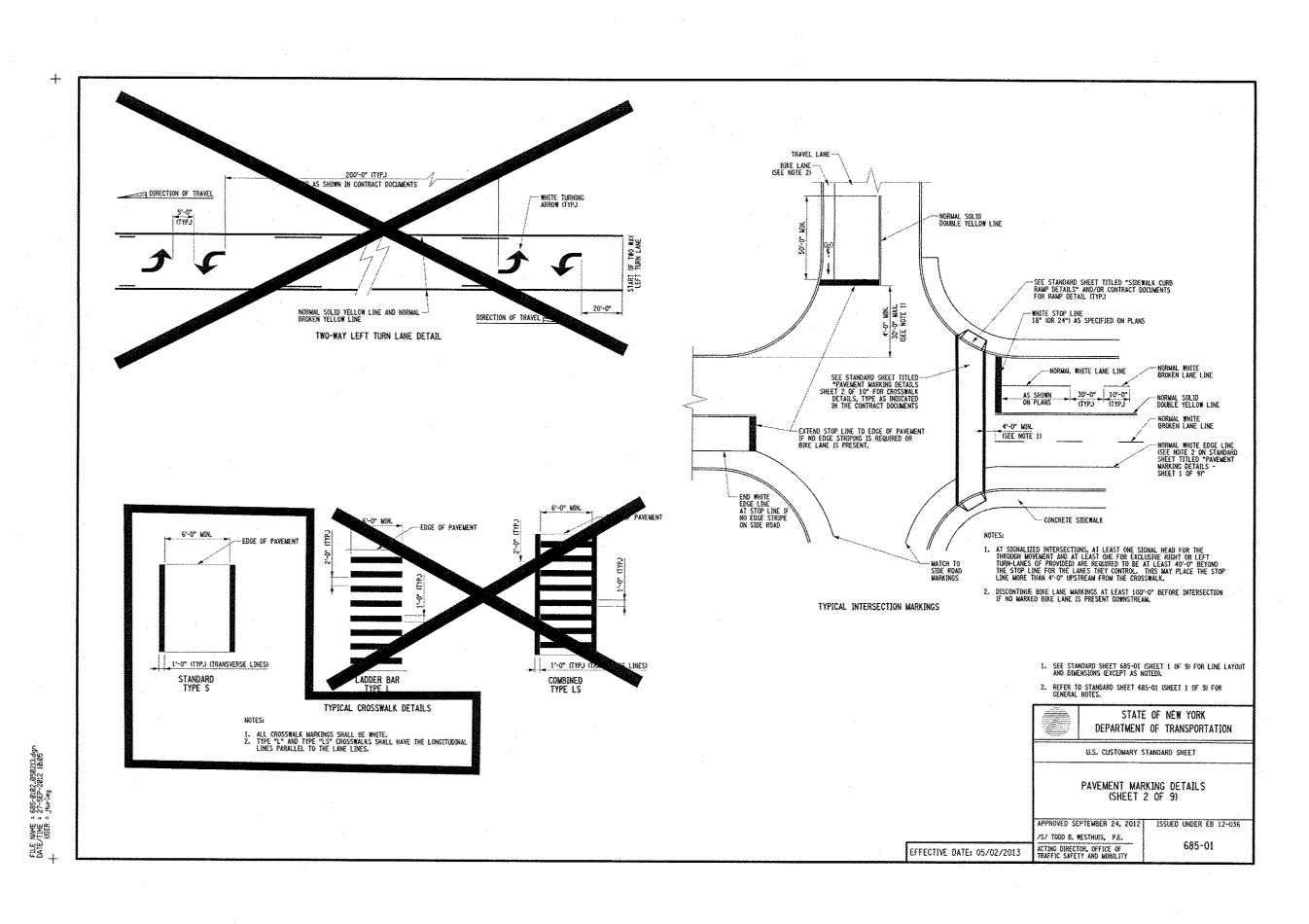
SHEET NUMBER:

TITLE:

C - 11

COMMENTS

NOT ISSUED FOR CONSTRUCTION
06\_41847.44\_DT.DWG





13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER: 10688 SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300) TOWN OF NÈWBURGH, NY PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER: 84094

ENGINEER:



Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606 914.467.6600 100 Great Meadow Road

Suite 200 Wethersfield, CT 06109 860.807.4300

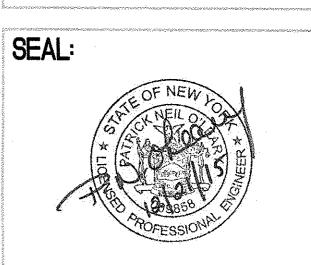
DEVELOPER:

T.M.

CROWLEY

& ASSOCIATES T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD

SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601



REVISIONS:

| 2 PER TOWN COMMENTS  | 12/17/15  |
|--|---|
| 1 PER TOWN COMMENTS  | 11/23/15  |
| PROJECT MANAGER:   |   |
| PLANNING ENGINEER:   | AMK /   |
| REVIEWED BY:   |   |
| DATE:  | October 19,   |
| JOB NUMBER:  | 4184  |
| rimanina di mangana di<br>TITLE: | S. (1987) S. A. Aller M. (1985) S. (1986) B. (1986) S. (1986) S. (1986) S. (1986) S. (1986) S. (1986) S. (1986) |

Site Details 7

SHEET NUMBER:

COMMENTS:

NOT ISSUED FOR CONSTRUCTION

#### Landscape Notes

- ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED CAREFULLY AS SHOWN ON THE PLANS FOR FIELD REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALL ATION.
- 2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
- 3. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED AND STABILIZED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
- 4. A 3-INCH DEEP SHREDDED PINE BARK SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE. BIORETENTION AREA / RAIN GARDEN SHALL BE MULCHED AS NOTED BELOW.
- 5. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- 6. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND PLANT LABELS PRIOR TO BIDDING.
- 7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE
- 8. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN
- 9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- 10. AREAS DESIGNATED "LOAM & SOD" SHALL RECEIVE 6" OF LOAM AND SPECIFIED SOD MIX. LAWNS OVER 3:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC. SOD AREAS 3:1 SLOPE AND STEEPER SHALL BE STAKED WITH 6-INCH MINIMUM STAKE LENGTHS. INSTALL STAKES AT A MINIMUM OF 1 EVERY 2 SQUARE FEET, OR PER THE RECOMMENDATION OF THE MANUFACTURER.
- 11. AREAS DESIGNATED "LOAD AND HYDROSEED (TYP) SHALL RECIEVE A MINIMUM OF 4" OF LOAM AND SPECIFIED HYDROSEED (TYP) MIX. LAWNS 3:1 SLOPE AND STEEPER SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
- 12. ALL DISTURBED AREAS NOT OTHERWISED NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND HYDROSEED (TYP) OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 13. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT AT THE FOLLOWING POINTS DURING CONSTRUCTION:
- O TO TAG PLANT MATERIALS
  O TO REVIEW PLANT LAYOUT/STAKING/PLANT BEDS AND TREE PITS AT ONE SITE VISIT
- DURING INSTALLATION
  O FOR FINAL WALK-THROUGH AND PUNCH LIST AT WHICH TIME THE CONTRACTOR SHALL DEMONSTRATE THE FULLY INSTALLED IRRIGATION SYSTEM.
- 14. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING TO THE LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO PLANTING OR SEEDING:
- O ALL SEED AND SOD MIXES
  O PLANTING SOILS TEST RESULTS AND RECOMMENDATIONS FROM TESTING
- LABORATORY
  O MANUFACTURER'S DATA ON ALL SOIL AMENDMENTS
- 15. THIS PLAN IS INTENDED FOR PLANTING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

#### Infiltration Basin & Small Detention Basin

- THE INFILTRATION BASIN SHALL NOT BE PLACED ON-LINE UNTIL THE ENTIRE INFILTRATION AREA, INCLUDING SIDE SLOPES, HAS BEEN STABILIZED AND VEGETATION HAS ESTABLISHED. THE INFILTRATION BASIN AREA SHALL BE PROTECTED FROM SEDIMENT LADEN RUNOFF.
- BASIN BOTTOM: LOAM AND SOD ON BOTTOM OF STORMWATER DETENTION BASIN TO BE NEW ENGLAND EROSION CONTROL & RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES AT 35 LBS/ACRE AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (OR APPROVED EQUAL).
- BASIN SIDESLOPES: LOAM AND SOD SIDESLOPES OF BASIN (ALL SIDES) WITH EROSION CONTROL & RESTORATION SEED MIX FOR DRY SITES AT 35 LBS/ ACRE AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. (OR APPROVED EQUAL).
- 4. EROSION CONTROL BLANKET/MATTING TO BE CUREX® PHOTO- DEGRADABLE BLANKET. INSTALL EROSION CONTROL BLANKET/MATTING AFTER SEED PLACEMENT AND SECURE PER DETAIL/ SPECS.

QTY BOTANICAL NAME

Picea abies

5 Prunus incisa 'Okame'

QTY BOTANICAL NAME

llex glabra

15 llex crenata 'Hoogendoorn'

67 Hemercallis x 'Stella de Oro'

QTY BOTANICAL NAME

161 Iris versicolor

168 Pontederia cordata

152 Calamagrotis canadensis

199 Scirpus acutus

Rosa acicularis 'The Fairy'

Juniperus conferta 'Blue Pacific'

Juniperus procumbens 'Nana'

Clethra alnifolia 'Hummingbird'

187 Pennisetum alopecuroides 'Hameln'

Spiraea x bumalda 'Little Princess'

Quwexua pluareia

14 Thuja occidentalis 'Smaragd'

Acer rubrum 'October Glory'

Gleditsia triacanthos `Shademaster` TM Shademaster Locust

**COMMON NAME** 

COMMON NAME Norway Spruce

COMMON NAME

**COMMON NAME** 

The Fairy Rose (Min)

Little Princess Spirea

Blue Pacific Juniper

Garden Juniper

**COMMON NAME** 

COMMON NAME

**COMMON NAM** 

Pickerelweed

Hardstem Bulrush

Blue Flag

Blue Joint

Stella de Oro Daylily

Inkberry Holly

Oakme Cherry

Pin Oak

`October Glory` Maple

Emerald Green Arborvitae

Hoogendoorn Japanese Holly 18 - 24" SPD

Hummingbird's Summersweet 2 - 2 1/2` HT.

Hameln Dwarf Fountain Grass 1 GAL.

3 1/2 - 4" CAL

2 1/2 - 3" CAL

2 1/2 - 3" CAL.

2 1/2 - 3" CAL.

2 - 2 1/2` HT.

18 - 24" SPD

18 - 24" SPD

18 - 24" SPD

15 - 18" SPD

1 GAL.

1 GAL.

1 GAL.

1 GAL.

18" O.C.

SPACING

18" O.C

SPACING 24" O.C.

24" O.C.

24" O.C.

24" O.C.

LEGEND

6 - 7` HT.

6 - 7' HT.

5. TOPSOIL ON BOTTOM OF INFILTRATION BASIN TO BE 4" OF SANDY LOAM, MATCHING THE SPECS NOTED UNDER "BIORETENTION BASIN - CONSTRUCTION NOTES", THIS SHEET.

EVERGREEN TREES QTY BOTANICAL NAME

ORNAMENTAL TREES QTY BOTANICAL NAME

ANNUAL/PERENNIALS QTY BOTANICAL NAME

BIORETENTION PLANTS QTY BOTANICAL NAME

PLANT SCHEDULE

SLP

CC

#### Irrigation Notes

- CONTRACTOR SHALL PROVIDE FOR OWNER THE COMPLETE IRRIGATION SYSTEM
  DESIGN AND INSTALLATION FOR PLANTINGS AND LAWN AREAS. DESIGN SHALL BE
  CERTIFIED BY A PROFESSIONAL LANDSCAPE ARCHITECT, ENGINEER, OR CERTIFIED
  IRRIGATION DESIGNER. DESIGN PLANS SHALL BE SUBMITTED TO OWNER FOR REVIEW
  AND APPROVAL PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE INSTALLATION OF THE IRRIGATION SYSTEM.
- CONTRACTOR SHALL PROVIDE DRAWINGS, MATERIAL SPECIFICATIONS, SCHEMATICS, AND OTHER LITERATURE AS MAY BE REQUIRED, FOR ALL CONDUIT, CONTROLS, TIMERS, VALVES, SPRINKLER HEADS, CONNECTORS, WIRING, RAIN GAUGE, ETC. TO THE OWNER'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO INSTALLATION.
- 4. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND SUB CONTRACTORS.
- (INSIDE BUILDING) BACKFLOW PREVENTER AND METER IS REQUIRED. IT SHALL BE IN CONFORMANCE WITH STATE AND MUNICIPAL REQUIREMENTS.
- 6. (INSIDE BUILDING) IRRIGATION CONTROL PANEL, BACKFLOW PREVENTER AND METER SHALL BE LOCATED IN THE BUILDING MECHANICAL ROOM. COORDINATE WITH THE GENERAL CONTRACTOR.
- 7. SITE CONTRACTOR SHALL PROVIDE 4" SCHEDULE 40 PVC SLEEVES UNDER PAVEMENT TO PROVIDE ACCESS FOR IRRIGATION LINES TO ALL IRRIGATED AREAS.

#### Rain Garden - Construction Notes

- RAIN GARDEN SHALL NOT BE PLACED ON-LINE UNTIL THE ENTIRE CONTRIBUTING BIORETENTION AREA
  HAS BEEN STABILIZED AND VEGETATION HAS ESTABLISHED. THE BIORETENTION BASIN AREA SHALL BE
  PROTECTED FROM SEDIMENT LADEN RUNOFF.
- 2. THE RAIN GARDEN SHALL CONTAIN A PLANTING SOIL OF SANDY LOAM, LOAMY SAND, LOAM (USDA) OR A LOAM/SAND MIX WITH THE FOLLOWING COMPOSITION (RESULTS OF TESTING TO BE SUBMITTED TO
  - ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION):
  - SAND 80-85% BY VOLUME - CLAY < 2%
  - SILT 0-12%
  - ORGANIC MATTER 3-5%
  - a. SOIL SHALL BE FREE FROM STONES OVER 2" DIAMETER, STUMPS, ROOTS OR OTHER DEBRIS. PLANTING SOIL SHALL CONFORM TO THE FOLLOWING: pH RANGE-5.5 TO 6.5; MAGNESIUM. SOLUABLE SALTS - LESS THAN 500 PPM. PROVIDE SOIL TEST RESULTS TO CONFIRM SOIL COMPLIANCE TO THE ABOVE CRITERIA.
  - b. ALL TESTING SHALL BE COORDINATED BY THE CONTRACTOR AND DONE BYY AN APPROVED INDEPENDENT TEST LABORATORY OR BY THE AGRICULTURE UNIT OF STATE UNIVERSITY SYSTEM. CONTRACTOR SHALL PROVIDE REQUIRED REPRESENTATIVE SAMPLES OF MATERIAL FOR TESTING TO THE TESTING LABORATORY SITE.
  - c. THE RESULTS OF THE TESTING SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO
- AUGMENT PLANTING SOIL TO 30 40% COMPOST. COMPOST SHALL BE PROCESSED YARD WASTE OR AGED LEAVES. COMPOST SHALL NOT CONTAIN BIOSOLIDS.
- PROVIDE A 3" DEEP LAYER OF AGED (6 MOS. MIN), COMPOSTED, SHREDDED PINE MULCH OVER SOIL SURFACE.
- 5. SAND SHALL CONFORM TO ASTM D 422, AND BE FREE OF DELETERIOUS MATERIAL.
- TOPSOIL SHALL CONSIST OF TOPSOIL FROM ON SITE STOCKPILE, OR LOAM BORROW, WITH SOIL
  AMENDMENTS ADDED TO MEET THE ABOVE SPECIFICATION.
- 7. PLANTING SOIL SHALL BE PLACED IN LIFTS OF LESS THAN 12 INCHES AND LIGHTLY COMPACTED (MINIMUM COMPACTIVE EFFORT) BY TAMPING OR ROLLING WITH A HAND-OPERATED LANDSCAPE ROLLER. HEAVY EQUIPMENT SHALL BE RESTRICTED FROM TRAVELING OVER THE BIORETENTION AREA.
- 8. SEE GRADING, DRAINAGE, AND EROSION CONTROL PLAN FOR DIMENSIONS, ELEVATIONS, PIPE MATERIALS AND SIZES, LOCATIONS AND INVERTS OF BIORETENTION BASIN AND BIORETENTION AREA ELEMENTS.
- BASIN SIDESLOPES: SEED SIDESLOPES OF BASIN (ALL SIDES) WITH EROSION CONTROL & RESTORATION SEED MIX FOR DRY SITES AT 35 LBS/ ACRE AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. (OR APPROVED EQUAL)
- 10. EROSION CONTROL BLANKET/MATTING TO BE CUREX® PHOTO- DEGRADABLE BLANKET. INSTALL EROSION CONTROL BLANKET/MATTING AFTER SEED PLACEMENT AND SECURE PER DETAIL/ SPECS.

#### — SEE BASIN BOTTOM & SIDESLOPE SEEDMIX -LOAM & SOD (GRASS FILTER STRIP) - SEE SIDESLOPE - MULCH BOTTOM ELEVATION OF BASIN SEE BASIN BOTTOM & LOAM & SOD SIDE SLOPES -SIDESLOPE SEEDMIX KAL LOAM & SOD (TYP)-- MULCH BED (TYP) MULCH BED (TYP) ---EXISTING BUILDING - MULCH BOTTOM ELEVATION OF BASIN - SEE SIDESLOPE SEEDMIX -LOAM & SOD (GRASSED LOAM & SOD SWALE -FILTER STRIP) - MULCH BED (TYP) HYRDOSEED (TYP) SECTION 60 BLOCK 3 LOT 6.1 NOW OR FORMERLY UNION AVENEUE (NYS ROUTE 300) LOUIS J. GALLO 3 LOT 3.2 CVS/pharmacy AND JEAN F. GALLO ERLY LOAM & OT, LICHYDROSEED (TYP) 13,600 TYPE B LIBER 2323 CP 74 72 PARKING SPACES FFE: 379.0 HYDROSEED (TYP) LOAM & HYDROSEED (TYP) ----S 1347'27" W . 1.75 -LOAM & HYDROSEED (TYP). **PRIVATE** DRIVE SECTION 60 BLOCK 3 LOT 26.1 NOW OR FORMERLY KALIAN 1437 LLC LIBER 13837 OP 790 SCALE IN FEET



13,600 SF - TYPE B SIDE DRIVE-THRU STORE NUMBER:

SOUTH PLANK ROAD (RT 52) & UNION AVE (RT 300)
TOWN OF NEWBURGH, NY
PROJECT TYPE: NEW
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CS PROJECT NUMBER:

ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street

Suite 360 White Plains, NY 10606

914.467.6600 100 Great Meadow Road

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DEVELOPER:

FAX (401) 721-1601

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14 BREAKNECK HILL ROAD
SUITE 101
LINCOLN, RHODE ISLAND 02865
TEL (401) 721-1607

SEAL:



REVISIONS:

 2
 PER TOWN COMMENTS
 12/17/15

 1
 PER TOWN COMMENTS
 11/23/15

PNO

MRG

41847.44

AMK / AEF

October 19, 2015

PROJECT MANAGER:

PLANNING ENGINEER:

REVIEWED BY:

EVIEWED BY:

DATE:

JOB NUMBER:

Planting Plan

SHEET NUMBER:

L — 1

COMMENTS:

NOT ISSUED FOR CONSTRUCTION

07\_41847.44\_LA.DWG

1. LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF

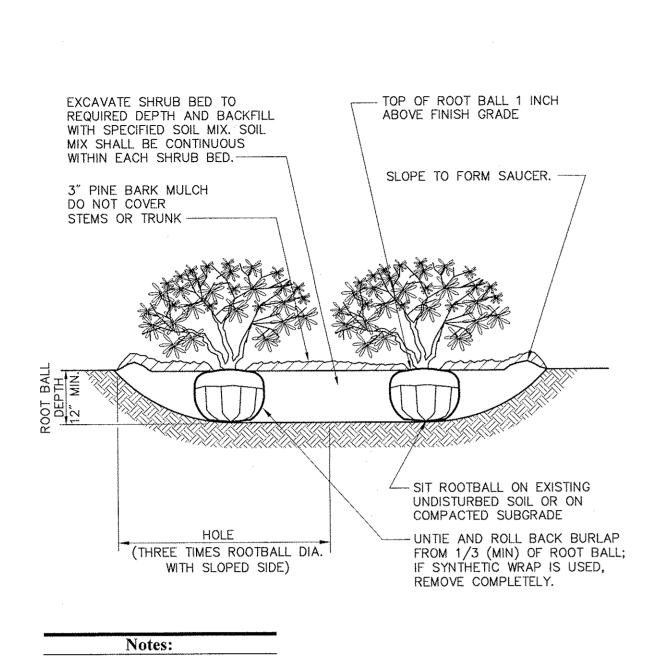
CONTAINER GROWN SHRUBS.

**Multistem Tree Planting** 

N.T.S.

**Shrub Bed Planting** 

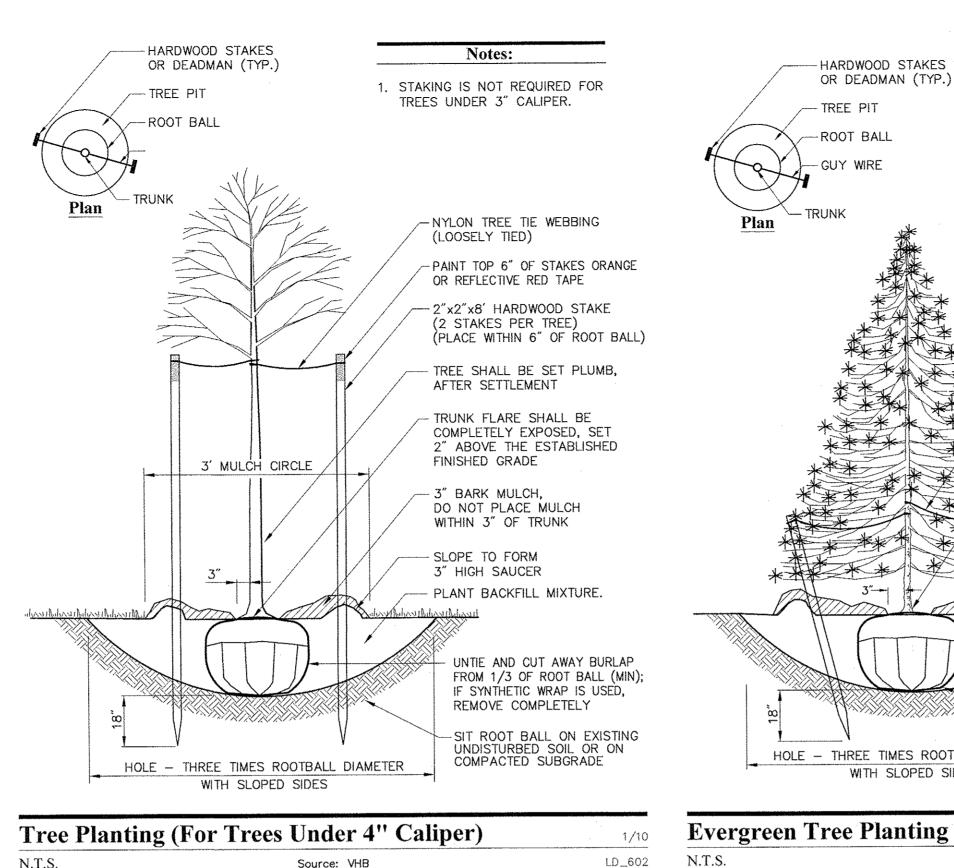
N.T.S.



6/08

LD\_601

N.T.S.



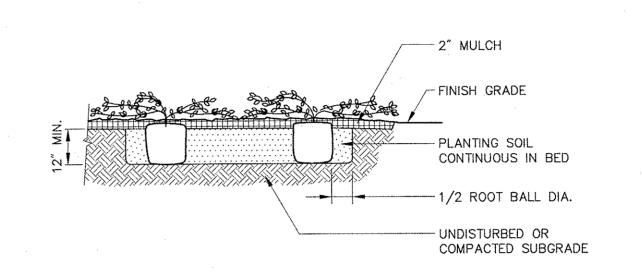
Source: VHB

LD\_602

| HARDWOOD STAKES<br>OR DEADMAN (TYP.)              | Notes:  |
|---|---|
| TREE PIT  | <ol> <li>STAKING IS NOT REQUIRED FOR<br/>TREES UNDER 10' HIGH.</li> </ol>   |
| ROOT BALL GUY WIRE                                | <ol> <li>PAINT TOP OF STAKES ORANGE<br/>OR REFLECTIVE RED TAPE.</li> </ol>  |
| Plan TRUNK  |   |
|   | NYLON TREE TIE WEBBING (LOOSELY TIED)   |
| ***   | TRUNK FLARE SHALL BE SET 2" ABOVE THE ESTABLISHED FINISHED GRADE  |
|   | 3" BARK MULCH, DO NOT PLACE<br>MULCH WITHIN 3" OF TRUNK   |
|   | 2"X2" HARDWOOD STAKE OR DEADMAN (2 STAKES PER TREE) TIGHTEN AS SHOWN  |
| *****   | SLOPE TO FORM 3" HIGH SAUCER.   |
| HOLE - THREE TIMES ROOTBALL DIA WITH SLOPED SIDES | PLANT BACKFILL MIXTURE.  UNTIE AND CUT AWAY BURLAP FROM 1/3 OF ROOT BALL (MIN); IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY  SIT ROOT BALL ON EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADE |

Source: VHB

|                     |                   | N       |
|---------------------|-------------------|---------|
|                     |                   |         |
| PLANT SPACING ("A") | ROW SPACING ("B") |         |
| 6 IN. O.C.          | 5 IN. O.C.        | A"——    |
| 8 IN. O.C.          | 7 IN. O.C.        |         |
| 10 IN. O.C.         | 8-1/2 IN. O.C.    |         |
| 12 IN. O.C.         | 10-1/2 IN. O.C.   | "B" 60° |
| 15 IN. O.C.         | 13 IN. O.C.       | 7- 1    |
| 18 IN. O.C.         | 16 IN. O.C.       |         |
| 24 IN. O.C.         | 21 IN. O.C.       |         |
|                     |                   | •       |

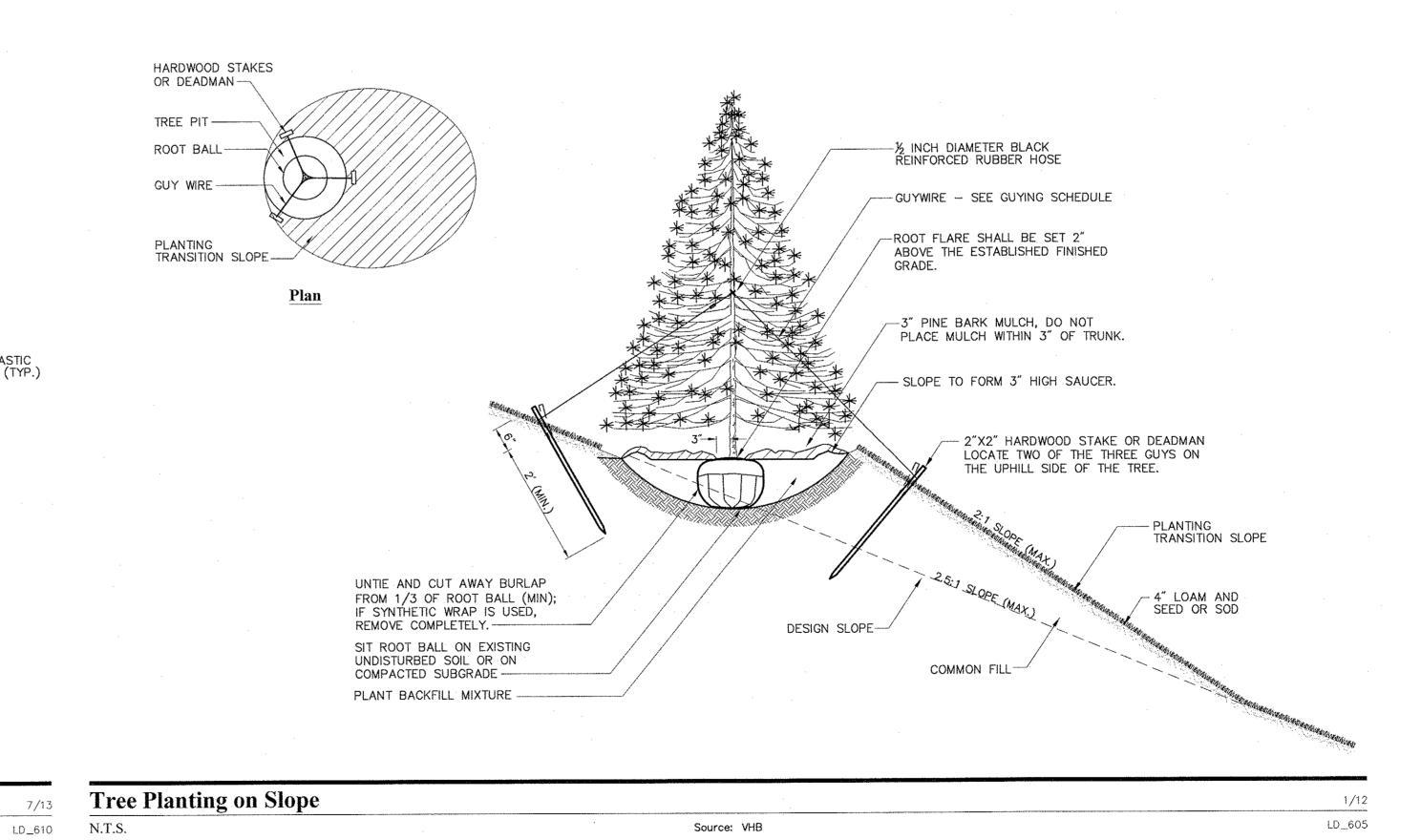


| <b>Ground Cover Planting</b> |         |     | 11/09  |
|------------------------------|---------|-----|--------|
| N.T.S.                       | Source: | VHB | LD_615 |

| HARDWOOD STAKES<br>OR DEADMAN (TYP.) | Notes:  |
|--------------------------------------|---|
| TREE PIT                             | <ol> <li>STAKING IS NOT REQUIRED FOR<br/>TREES UNDER 12' HIGH.</li> </ol>                                   |
| ROOT BALL                            |   |
| GUY WIRE                             |   |
| Plan TRUNK                           |   |
|                                      | NYLON TREE TIE WEBBING (LOOSELY TIED)   |
|                                      | PAINT TOP 6" OF STAKES ORANGE<br>OR REFLECTIVE RED TAPE   |
|                                      | 2"x2"x8' HARDWOOD STAKE (2 STAKES PER TREE) (PLACE WITHIN 6" OF ROOT BALL)                                  |
|                                      | TRUNK FLARE SHALL BE COMPLETELY EXPOSED, SET 2" ABOVE THE ESTABLISHED FINISHED GRADE                        |
|                                      | 3" PINE BARK MULCH,<br>DO NOT PLACE MULCH<br>WITHIN 3" OF TRUNK.  |
|                                      | PLANT BACKFILL MIXTURE.  — SLOPE TO FORM 3" HIGH SAUCER.  |
| 3"                                   |   |
|                                      |   |
| HOLE - THREE TIMES ROOTBALL DIAM     | UNTIE AND CUT AWAY BURLAP<br>FROM 1/3 OF ROOT BALL (MIN<br>IF SYNTHETIC WRAP IS USED,<br>REMOVE COMPLETELY. |
| WITH SLOPED SIDES                    | SIT ROOT BALL ON EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADE   |

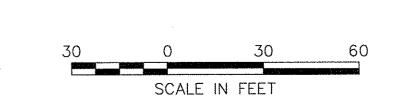
Source: VHB

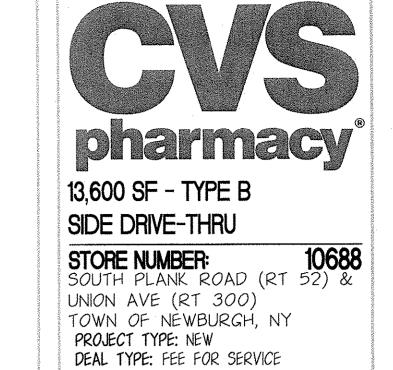
| DR                          |                 | TREE TRUNK   |                          |
|-----------------------------|-----------------|--|--------------------------|
| NGE                         |                 | Plan   |                          |
| BALL)                       |                 | MAX. O.C.  -1"x1"x6' POST (TYP.)  WEB FE   | E PLASTIC<br>ENCE (TYP.) |
| CER.                        | 4′-0″<br>(TYP.) |  |                          |
| BURLAP<br>L (MIN);<br>JSED, |                 | Elevation (3) EQUALLY SPACED TIES (TYP.)   |                          |
| SOIL<br>ADE                 |                 | Notes:  1. INSTALL TREE PROTECTION FENCE AT THE DRIP LINE OF EXISTING TREES TO REMAIN. |                          |
| 6/08                        | Tree Pr         | otection Fence   | 7/13                     |
| LD_606                      | N.T.S.          | Source: VHB  | LD_610                   |



6/08

LD\_604





#### **ENGINEER:**

CS PROJECT NUMBER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606 914.467.6600

100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

#### DEVELOPER:

T.M.CROWLEY

& ASSOCIATES

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601





**REVISIONS:** 

| 1 PER TOWN COMMENTS | 11/23/15 |
|---------------------|----------|
|---------------------|----------|

PROJECT MANAGER: PNO AMK / AEF PLANNING ENGINEER: REVIEWED BY:

October 19, 2015 DATE: JOB NUMBER: 41847.44

Planting Details

SHEET NUMBER:

COMMENTS: NOT ISSUED FOR CONSTRUCTION 07\_41847.44\_LA.DWG

#### **Record Parcel Descriptions**

#### CHICAGO TITLE INSURANCE COMPANY

Title No.: 3714-00199

Parcel I:

ALL that certain plot, piece or parcel of land, situate, lying and being in the Town of Newburgh, County of Orange and State of New York and more particularly

BEGINNING at a point on the southwesterly side of NYS Route 52, said point being the northeasterly corner of the premises and the northwesterly corner of lands now or formerly of Louis & Jean Gallo, T.M. # 60-3-6.1 and running thence;

SCHEDULE A DESCRIPTION

. South 40° 04' 28" West along the southeasterly line of the premises and the northwesterly line of said lands now or formerly of Louis & Jean Gallo, T.M. # 60-3-6.1 the distance of 317.88 feet to an iron rod found at or near a stone wall at a point in the northeasterly line of lands now or formerly of Corel Realty, Inc., T.M. # 60-3-3 and being the southwesterly corner of said lands now or formerly of Louis & Jean Gallo, T.M. # 60-3-6.1 and being the southeasterly

2. North 53° 04' 21" West along the southwesterly line of the premises, along or near a stone wall and along the northeasterly line of said lands now or formerly of Corel Realty, Inc. T.M. # 60-3-3 the distance of 236.81 feet to a pipe found

3. North 24° 50' 15" East along the northwesterly line of the premises and the southeasterly line of said lands now or formerly of Corel Realty, Inc., T.M. # 60-3-3 and the southeasterly line of lands now or formerly of Joseph & Michelle Mikita, T.M. # 60-3-2 the distance of 418.00 feet to a point in the southwesterly side of NYS Route 52, being the northeasterly corner of said lands now or formerly of Joseph & Michelle Mikita, T.M. # 60-3-2 and being the

. South 38° 06' 45" East along the southwesterly side of NYS Route 52 the distance of 353.80 feet to the northwesterly corner of lands now or formerly of Louis & Jean Gallo, T.M. # 60-3-6.1, the northeasterly corner of the premises and the point or place of BEGINNING.

#### CHICAGO TITLE INSURANCE COMPANY

Title No.: 3714-00199 LEGAL DESCRIPTION

ALL that certain plot, piece or parcel of land situate, lying and being in the Town of Newburgh, County of Orange and State of New York, being shown and designated as PARCEL "A" Lands to be conveyed to Costubbs LLC on that certain map entitled "LOT LINE CHANGE PLAN Lands of COSTUBBS LLC and Lands of CORKL REALTY, N.Y.S. Routes 52 & 300, Town of Newburgh, Orange County, New York", made by Vincent J. Dole Associates, dated 10-12-2005 and revised on 2-15-2006 and last revised on 3-3-2006 and filed in the Orange County Clerk's Office on March 6th, 2006 as Map # 172-06 and being more particularly bounded and described as

BEGINNING at a point in the northwesterly line of Union Avenue NYS Route 300 said point being the southerly most corner of lands now or formerly of Louis J. Gallo and Jean F. Gallo as acquired in the deed In Liber 2323 of Deeds, Page 74 (Tax Lot 60-3-6.1) and running thence;

1. South 29° 11' 02" West along the northwesterly line of Union Avenue - NYS Route 300 the distance of 1.75 feet to a point in the northeasterly line of lands now or formerly of Benjamin Harris and Bella Harris as acquired in the deed in Liber 1863 of Deeds, Page 975 (Tax Lot 60-3-26.1), thence;

2. North 62° 58' 36" West along the common boundary line between said lands now or formerly of Benjamin Harris and Bella Harris and the lands of Corel Realty, Inc. as acquired in Liber 3831 of Deeds, Page 76 (Tax Lot 60-3-1.-1, formerly

Tax Lot 60-3-3) the distance of 396.77 feet to a point, thence; 3. North 24° 50' 15" Bast through said lands of Corel Realty, Inc. the distance of 71.57 feet to a pipe at the southwesterly corner of lands of Costubbs, LLC as acquired in the deed in Liber 4679 of Deeds, Page 186 (Parcel I therein, Tax Lot

4. South 53° 04' 21° East along the common boundary line between Corel Realty.

Inc. and Costubbs, LLC (Tax Lot 60-3-5) and then along the southwesterly line of lands now or formerly of Louis J. Gallo and Jean F. Gallo as acquired in the deed in Liber 2323 of Deeds, Page 74 (Tax Lot 60-3-6.1) the distance of 405.61 feet to a point in the northwesterly line of Union Avenue - NYS Route 300 and being the point or place of BEGINNING.

~LEGAL DESCRIPTION CONTINUED-

#### Title Reference

REFERENCE IS MADE TO CHICAGO TITLE INSURANCE COMPANY CERTIFICATE FOR TITLE INSURANCE, TITLE No. 3714-00199, EFFECTIVE DATE: NOVEMBER 17, 2014.

SCHEDULE B-1 EXCEPTIONS

1-2. NOT SURVEY RELATED.

4-14. NOT SURVEY RELATED.

3. REFER TO SURVEY.

15. PROBABLE LOCATION OF RIGHT OF WAY DESCRIBED IN LIBER 1615 CP 211 IS PLOTTED ON SURVEY.

16. EASEMENT AGREEMENT IS UNABLE TO BE PLOTTED.

17. REFER TO MAP 172-06.

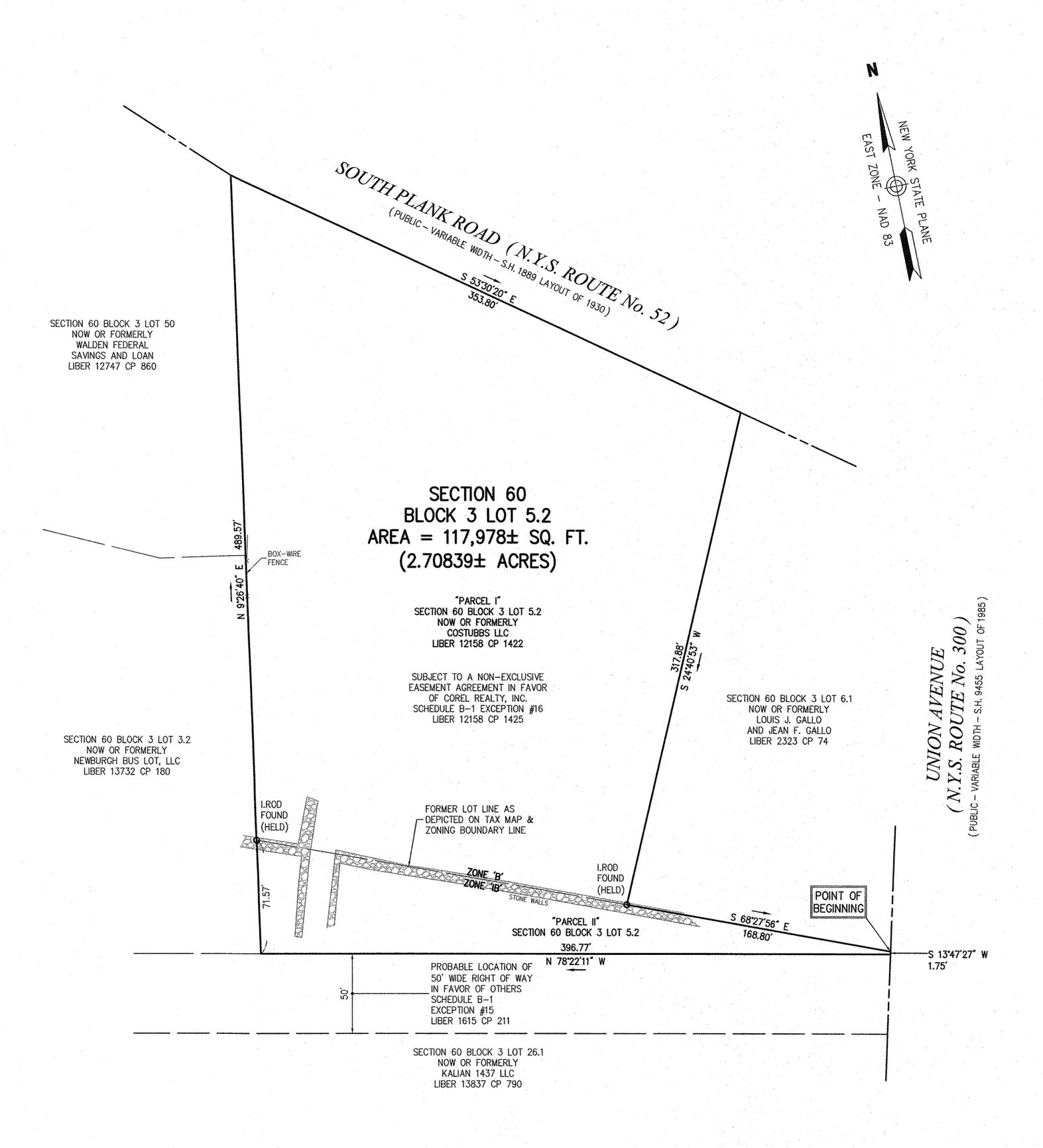
18-37. NOT SURVEY RELATED.

#### **General Notes**

BOUNDARY EVIDENCE DEPICTED HEREON IS BASED ON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB ON JUNE 2, 2015.

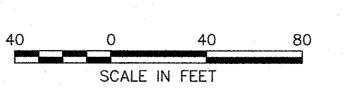
EXISTING CONDITIONS DEPICTED HEREON ARE BASED ON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB ON JUNE 2, 2015 AND JUNE 3, 2015.

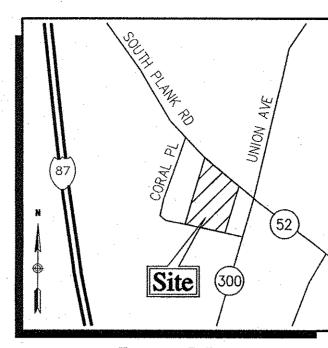
THE HORIZONTAL DATUM AND NORTH AZIMUTH DEPICTED HEREON REFER TO THE NEW YORK STATE PLANE COORDINATE SYSTEM - EAST ZONE, NAD 83.



#### Legend

O IRON PIN/REBAR FOUND PROPERTY LINE ---- EASEMENT LINE ----- STATE HIGHWAY LINE ----- ASSESSORS PARCEL LINE





#### **Survey Parcel Description**

BEGINNING AT A POINT ON THE WESTERLY HIGHWAY LINE OF UNION AVENUE, ALSO KNOWN AS NEW YORK STATE ROUTE NO. 300, SAID POINT BEING THE SOUTHEAST. CORNER OF LAND NOW OR FORMERLY OF LOUIS J. GALLO AND JEAN F. GALLO;

THENCE S 13'-47'-27" W ALONG THE WESTERLY HIGHWAY LINE OF SAID UNION AVENUE A DISTANCE OF 1.75' TO A POINT, SAID POINT BEING THE NORTHEAST CORNER OF LAND NOW OR FORMERLY OF KALIAN 1437 LLC;

THENCE N 78°-22'-11" W BOUNDED SOUTHERLY BY SAID LAND NOW OR FORMERLY OF KALIAN 1437 LLC A DISTANCE OF 396.77' TO A POINT, SAID POINT BEING THE SOUTHEAST CORNER OF LAND NOW OR FORMERLY OF NEWBURGH BUS LOT, LLC;

THENCE N 9°-26'-40" E BOUNDED WESTERLY BY SAID LAND NOW OR FORMERLY OF NEWBURGH BUS LOT, LLC A DISTANCE OF 489.57' TO A POINT ON THE SOUTHWEST HIGHWAY LINE OF SOUTH PLANK ROAD, ALSO KNOWN AS NEW YORK STATE ROUTE NO. 52;

THENCE S 53'-30'-20" E ALONG THE SOUTHWEST HIGHWAY LINE OF SOUTH PLANK ROAD A DISTANCE OF 353.80' TO A POINT, SAID POINT BEING THE NORTHWEST CORNER OF LAND NOW OR FORMERLY OF LOUIS J. GALLO AND JEAN F. GALLO;

THENCE S 24°-40'-53" W BOUNDED EASTERLY BY SAID LAND NOW OR FORMERLY OF LOUIS J. GALLO AND JEAN F. GALLO A DISTANCE OF 317.88' TO AN IRON ROD

THENCE S 68-27'-56" E BOUNDED NORTHERLY BY LAND NOW OR FORMERLY OF LOUIS J. GALLO AND JEAN F. GALLO A DISTANCE OF 168.80' TO THE POINT OF

SAID PARCEL CONTAINS APPROXIMATELY 117,978± SQUARE FEET (2.70839±



T.M. CROWLEY & ASSOCIATES

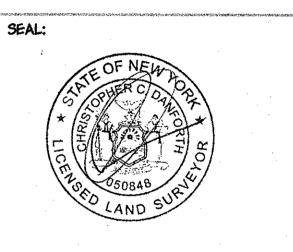
Landscape Architecture, PC 100 Motor Parkway

Hauppauge, NY 11788

Suite 135

631.787.3400

| CONSULTANT:  |  |
|--------------|--|
| DESIGNED BY: |  |
| CHECKED BY:  |  |
| APPROVED BY: | ************************************** |
| •            | ************************************** |





STORE NUMBER:

SOUTH PLANK ROAD (NYS RT 52) & UNION AVENUE (NYS RT 300)

#### DEVELOPER:

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

| REVISIONS:       |  |
|------------------|--|
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|                  | Delet all delete (Colon ), set et e tre trette anne dat set e trette en set en set en set en set en set en set |
| PROJECT MANAGER: | SKR  |
| SURVEYOR         | inderstandende en en oppositiet en de en                                   |
| SURVETUR         | -  |
| REVIEWED BY:     | TD   |
| DATE:            | 6/17/2015  |

ALTA/ACSM
Land Title Survey Property Survey

SHEET NUMBER:

JOB NUMBER:

COMMENTS: Scale 1"=40"

Sheet I of 2 4184744PL.DWG

41847.44

CHRISTOPHER C. DANFORTH, NYSPLS LICENSE No. 050848

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS

ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 3-5, 8, 11(b), 13, AND 14

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY MAP IS A VIOLATION

OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S SIGNATURE AND INKED SEAL

I HEREBY CERTIFY THAT THIS PLAN IS SUBSTANTIALLY CORRECT AS NOTED

OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JUNE 3, 2015.

OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE VALID TRUE COPIES.

DATE OF MAP: JUNE 17, 2015.

HEREON.

BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND

NEW TOWN OF NEWBURGH, NEW YORK

Legend ■ CATCH BASIN EEE CATCH BASIN ⊕ ROUND CATCH BASIN FLARED END SECTION DS . DOWNSPOUT DRAIN MANHOLE S SEWER MANHOLE © ELECTRIC MANHOLE **(1)** TELEPHONE MANHOLE MANHOLE SIGNAL MANHOLE W WATER MANHOLE WATER GATE ♦♦ SIAMESE CONNECTION FIRE HYDRANT O GAS GATE ▼ STREET SIGN □ LIGHT POLE & FLOOD LIGHT -O- UTILITY POLE - GUY POLE GUY WIRE BOLLARD/POST BORING MW - MONITORING WELL TP-1 ■ TESTPIT WF 1-100 ▲ WETLAND FLAG 100.0 × SPOT ELEVATION と HANDICAP SYMBOL — — EDGE OF PAVEMENT — — — EDGE OF GRAVEL/LANDSCAPE ---- EDGE OF TRAVELED WAY EDGE OF PATH ---- BUILDING OVERHANG STEEL GUARD RAIL WOOD GUARD RAIL CHAIN LINK FENCE ———— WOOD FENCE UNDERGROUND DRAINAGE LINE — — — — UNDERGROUND SEWER LINE OVERHEAD WIRE UNDERGROUND GAS LINE UNDERGROUND WATER LINE UNDERGROUND TELEPHONE LINE

--- UNDERGROUND CABLE LINE

WETLAND EDGE

--- --- EASEMENT LINE

------ STATE FREEWAY LINE

- - STATE HIGHWAY LINE ----- CITY/TOWN LAYOUT LINE

— UNDERGROUND FIBER OPTIC LINE

CONCRETE CURB SLOPED GRANITE EDGING VERTICAL GRANITE CURB SLOPED CONCRETE EDGING BITUMINOUS BERM BITUMINOUS CURB EDGE OF PAVEMENT BIT. BITUMINOUS PAVEMENT CONC. CONCRETE S/W SIDEWALK CENTER INVERT UTILITY POLE REINFORCED CONCRETE PIPE PVC POLYVINYLCHLORIDE PIPE DUCTILE IRON PIPE CORRUGATED METAL PIPE CORRUGATED PLASTIC PIPE VITRIFIED CLAY PIPE BROKEN WHITE LINE BROKEN YELLOW LINE DOUBLE YELLOW LINE SINGLE WHITE LINE SINGLE YELLOW LINE POST INDICATOR VALVE CHAIN LINK FENCE CATCH BASIN DRAIN MANHOLE SEWER MANHOLE OHW OVERHEAD LINE MW MONITORING WELL TESTPIT ETW EDGE OF TRAVELED WAY RIM= RIM ELEVATION INV= INVERT ELEVATION ELEV. ELEVATION F.F.E. FINISH FLOOR ELEVATION OVERHEAD TYPICAL AIR CONDITIONING ELECTRIC BOX ELECTRIC METER FIRE ALARM GAS METER HAND HOLE MAILBOX: PEDESTRIAN PUSH BUTTON TRAFFIC SIGNAL WATER METER PARKING BUMPER SPAN POLE

----- MASTARM

SHRUBS

DECIDUOUS TREE

EVERGREEN TREE

#### **General Notes**

BOUNDARY EVIDENCE DEPICTED HEREON IS BASED ON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB ON JUNE 2, 2015.

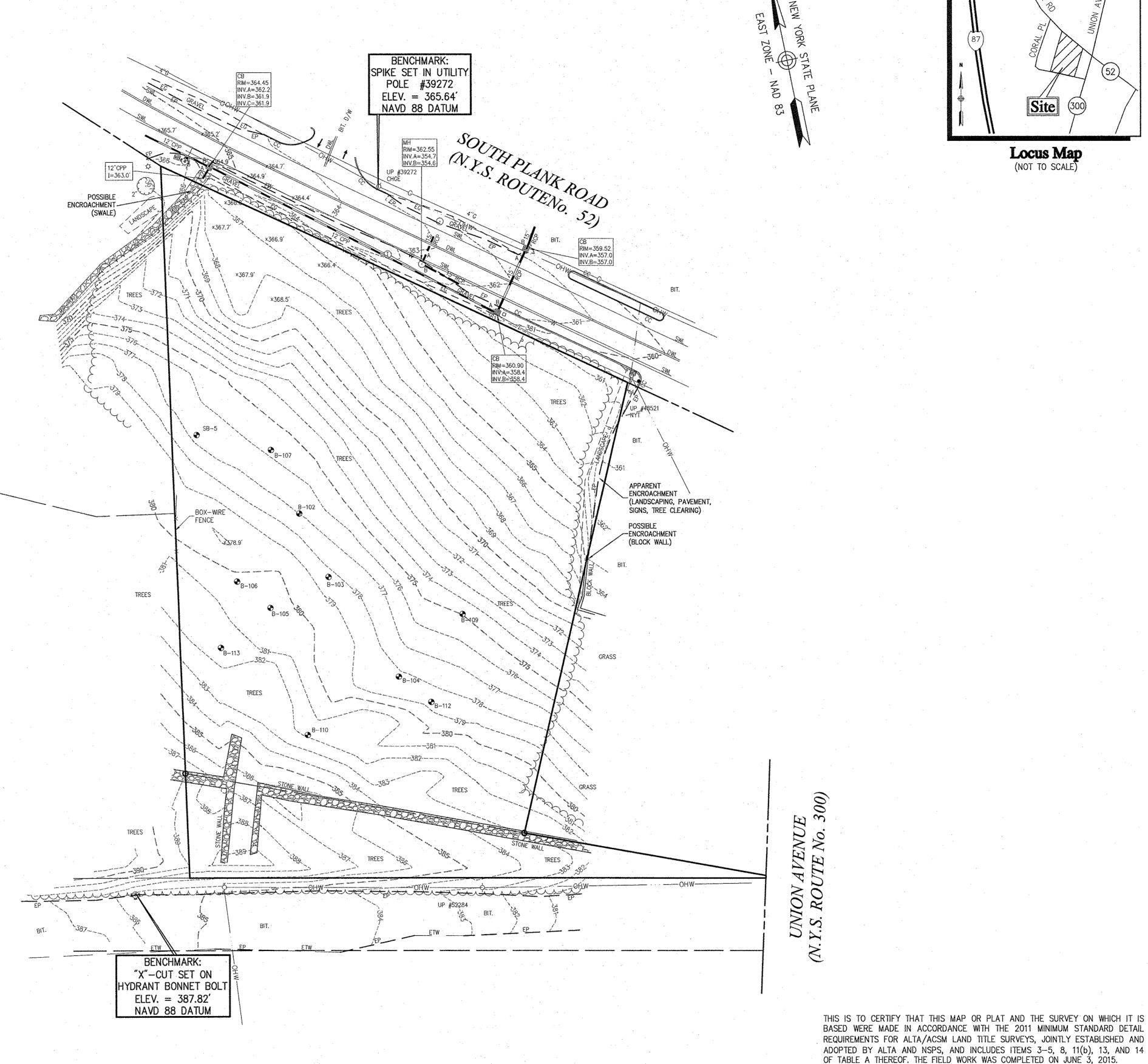
EXISTING CONDITIONS DEPICTED HEREON ARE BASED ON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB ON JUNE 2, 2015 AND JUNE 3, 2015.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES DEPICTED ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE DEPICTED ON THIS PLAN.

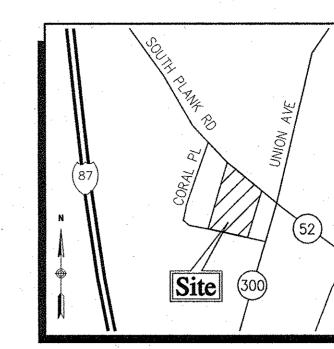
THE HORIZONTAL DATUM AND NORTH AZIMUTH DEPICTED HEREON REFER TO THE NEW YORK STATE PLANE COORDINATE SYSTEM - EAST ZONE, NAD 83.

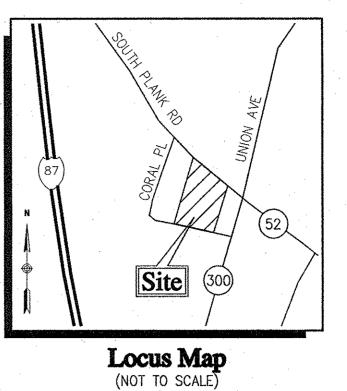
CONTOURS AND ELEVATIONS DEPICTED HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

PARCELS SURVEYED LIE WITHIN ZONE 'X' AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR ORANGE COUNTY, NEW YORK, MAP NUMBER 36071C0139E, EFFECTIVE DATE: AUGUST 3, 2009.



SCALE IN FEET





T.M. CROWLEY & ASSOCIATES

Landscape Architecture, PC

Hauppauge, NY 11788

100 Motor Parkway

Suite 135

631.787.3400

CONSULTANT: DESIGNED BY: CHECKED BY:

APPROVED BY:





STORE NUMBER:

SOUTH PLANK ROAD (NYS RT 52) & UNION AVENUE (NYS RT 300) TOWN OF NEWBURGH, NEW YORK

DEVELOPER:

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

REVISIONS:

PROJECT MANAGER: SKR SURVEYOR

6/17/2015

41847.44

REVIEWED BY: DATE:

JOB NUMBER:

ALTA/ACSM Land Title Survey
Topographic Survey

SHEET NUMBER:

DATE OF MAP: JUNE 17, 2015.

HEREON.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY MAP IS A VIOLATION

OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S SIGNATURE AND INKED SEAL

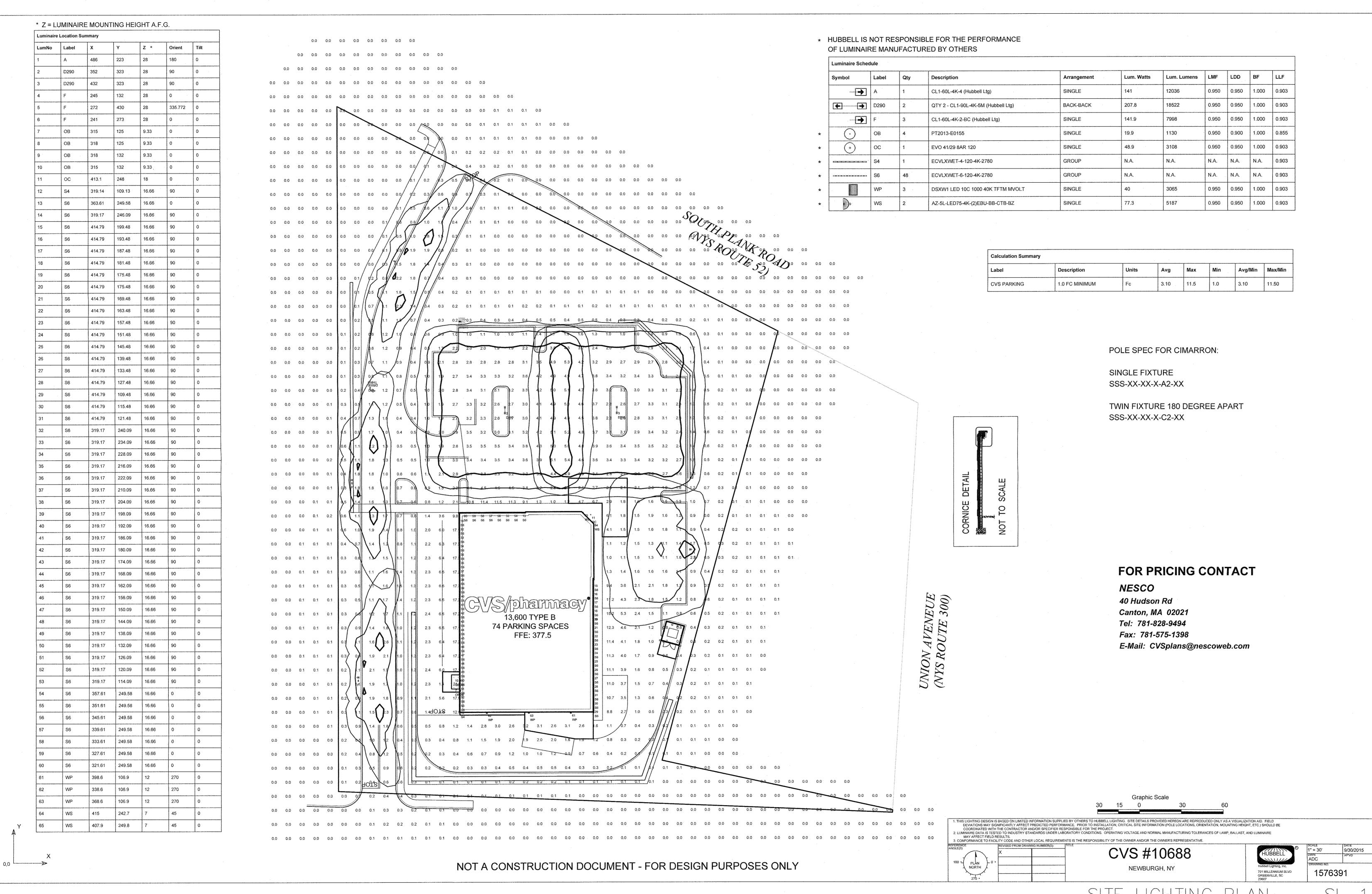
I HEREBY CERTIFY THAT THIS PLAN IS SUBSTANTIALLY CORRECT AS NOTED

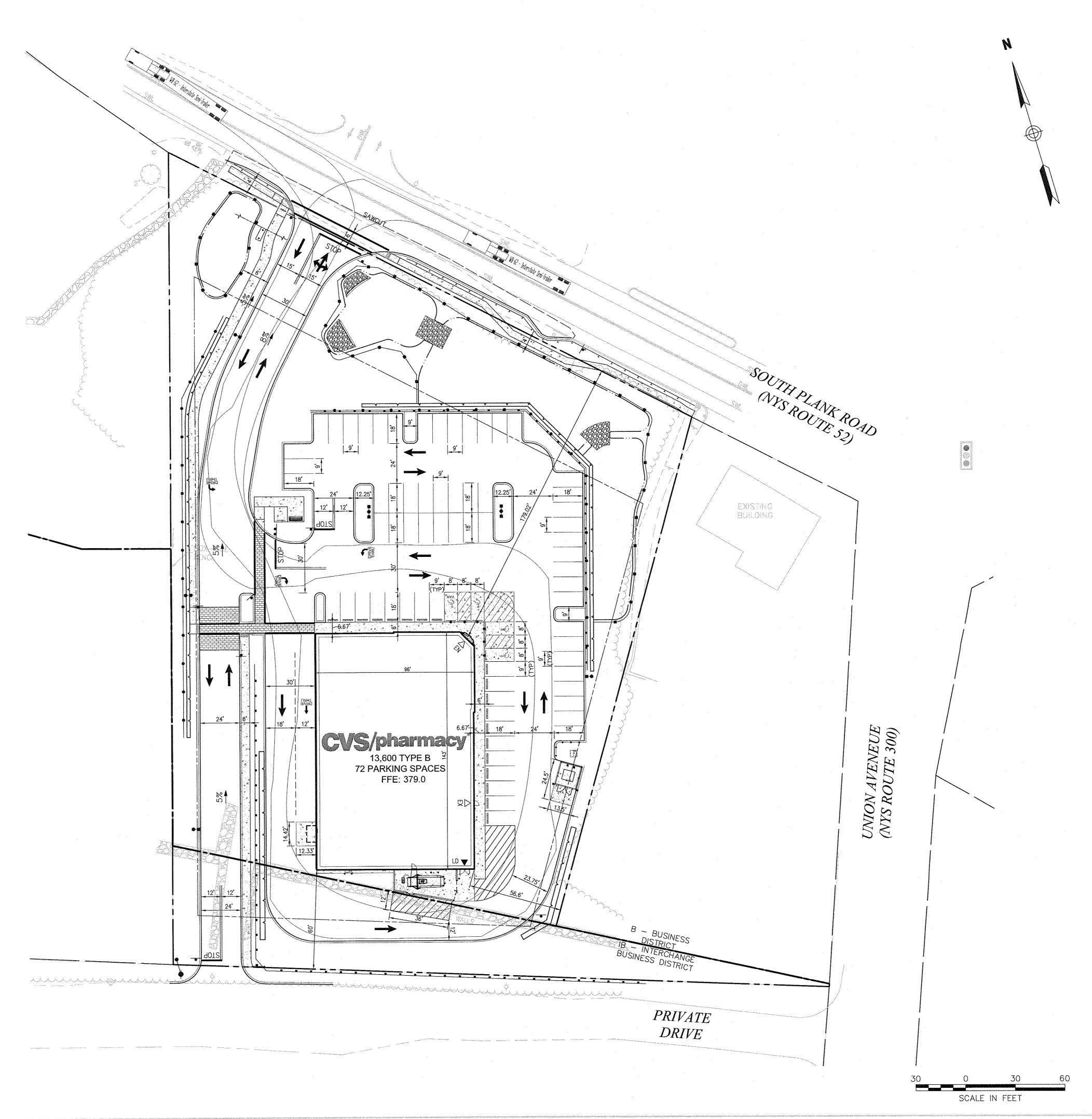
OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE VALID TRUE COPIES.

CHRISTOPHER C. DANFORTH, NYSPLS LICENSE No. 050848

COMMENTS: Scale |"=40"

Sheet 2 of 2 4184744EX.DWG





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13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER: 10688
SOUTH PLANK ROAD (RT 52) &
UNION AVE (RT 300)
TOWN OF NEWBURGH, NY
PROJECT TYPE: NEW
DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER: 84094

#### ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606

914.467.6600 100 Great Meadow Road

Suite 200 Wethersfield, CT 06109 860.807.4300

#### DEVELOPER:

T.M.

#### CROWLEY & ASSOCIATES

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721-1607 FAX (401) 721-1601

#### SEAL:

REVISIONS:

12/17/15 2 PER TOWN COMMENTS 11/23/15 1 PER TOWN COMMENTS

PNO

41847.44

PROJECT MANAGER: PLANNING ENGINEER:

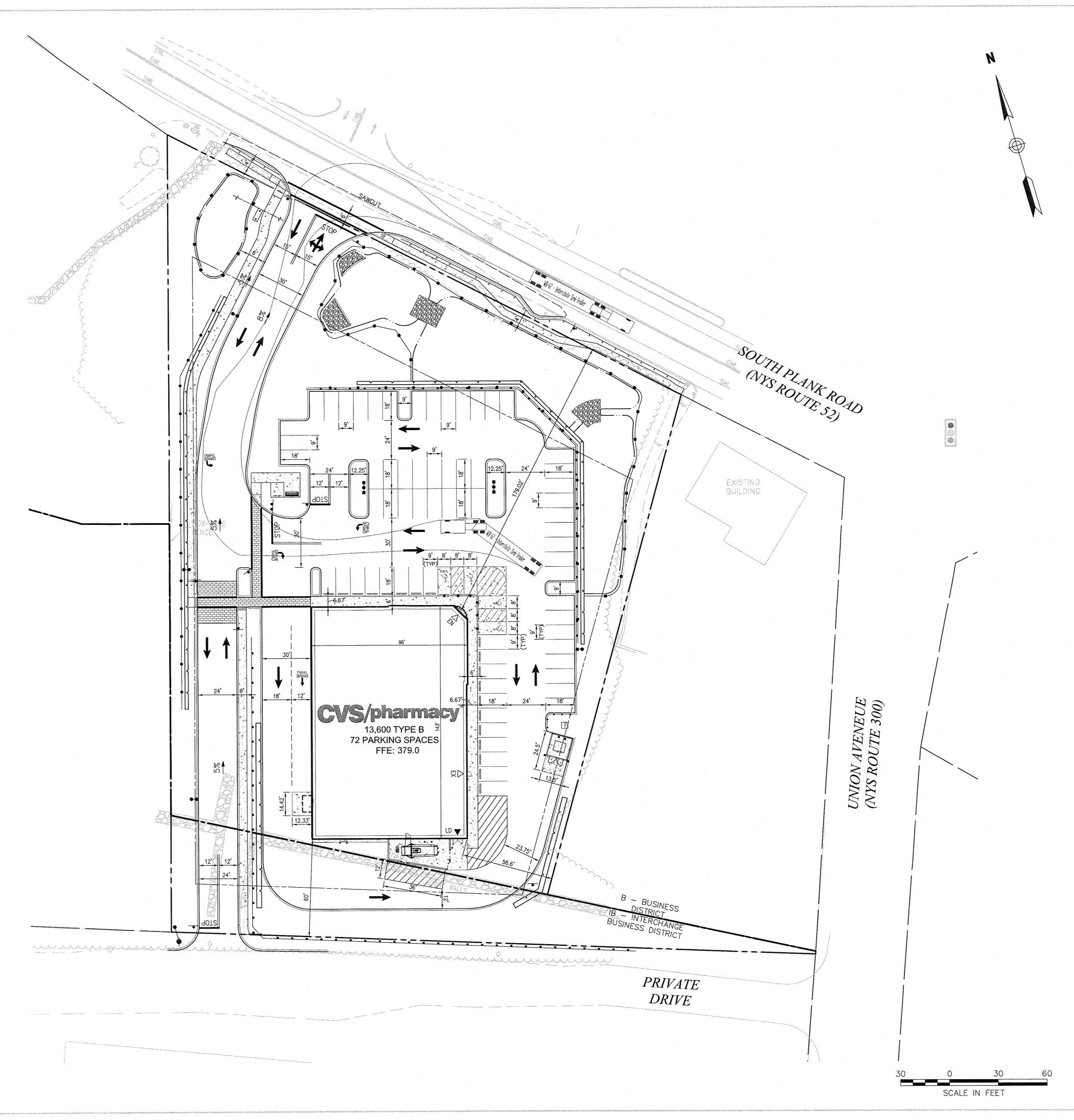
AMK / AEF REVIEWED BY:

October 19, 2015 DATE: JOB NUMBER:

# TITLE: Truck Turning Movement Plan 1 WB-62

SHEET NUMBER:

NOT ISSUED FOR CONSTRUCTION TRUCK TURN MOVEMENT.DWG



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Particular of the state of the

13,600 SF - TYPE B SIDE DRIVE-THRU

STORE NUMBER: 10688
SOUTH PLANK ROAD (RT 52) &
UNION AVE (RT 300)
TOWN OF NEWBURGH, NY
PROJECT TYPE: NEW
DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER: 84094

#### ENGINEER:



Engineering, Surveying & Landscape Architecture, PC 50 Main Street Suite 360 White Plains, NY 10606

914.467.6600

100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

#### DEVELOPER:

T.M.

#### CROWLEY & ASSOCIATES

T.M. CROWLEY & ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RHODE ISLAND 02865 TEL (401) 721–1607 FAX (401) 721–1601

#### SEAL:

REVISIONS:

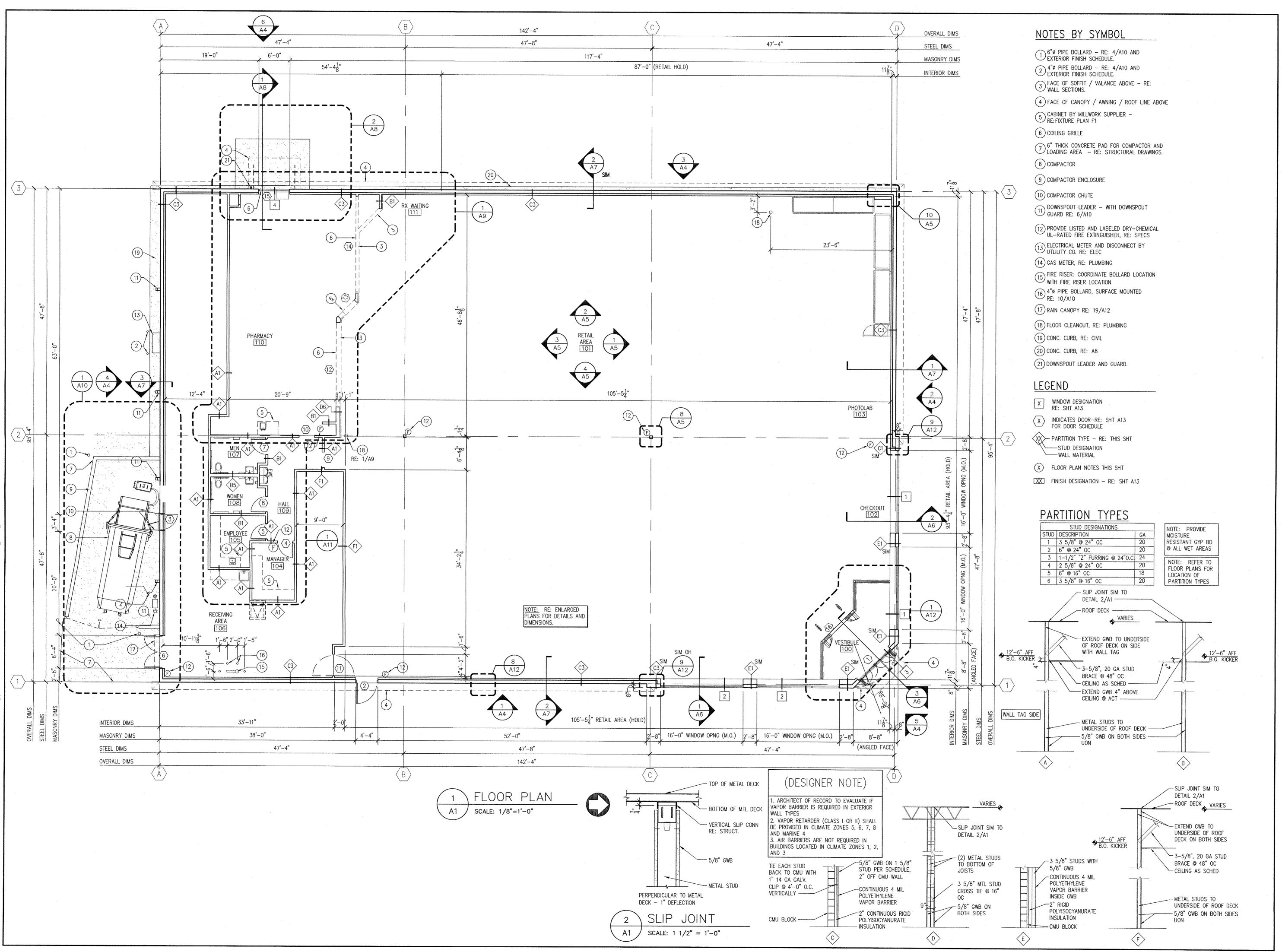
| 2 PER TOWN COMMENTS  | 12/17/15  |
|--|---|
| 1 PER TOWN COMMENTS  | 11/23/15  |
|  |   |
| PROJECT MANAGER:   | PNO   |
| PLANNING ENGINEER:   | AMK / AE  |
| REVIEWED BY:   | MR  |
| DATE:  | October 19, 201   |
| The Contract of the Contract o | A MAN AND A COLOR AND |

TITLE: Truck Turning
Movement Plan 2
WB-62

SHEET NUMBER:

JOB NUMBER:

NOT ISSUED FOR CONSTRUCTION TRUCK TURN MOVEMENT.DWG



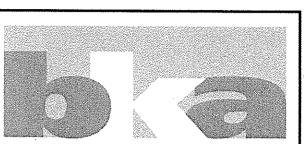


NEW

STORE NUMBER:

RT 52 & RT 300 NEWBURGH, NY 12550

PROJECT TYPE: NEW
DEAL TYPE: FEE FOR SERVICE
CS PROJECT NUMBER:



BKA Architects, Inc.

#### 142 Crescent Street Brockton, MA 02302

tel: 508.583.5603 fax: 508.584.2914 e-mail: bka@bkaarchs.com

| CON: | SULTANT | T: |  |
|------|---------|----|--|
|      |         |    |  |
|      |         |    |  |

DEVELOPER:

& ASSOCIATES

14 BREAKNECK HILL ROAD

SUITE 101

LINCOLN, RI

PH: 401-721-1607

FAX: 401-721-1601

REVISIONS:

DRAWING BY: KLP

DATE: 10/09/15

JDB NUMBER: #####

TITLE:

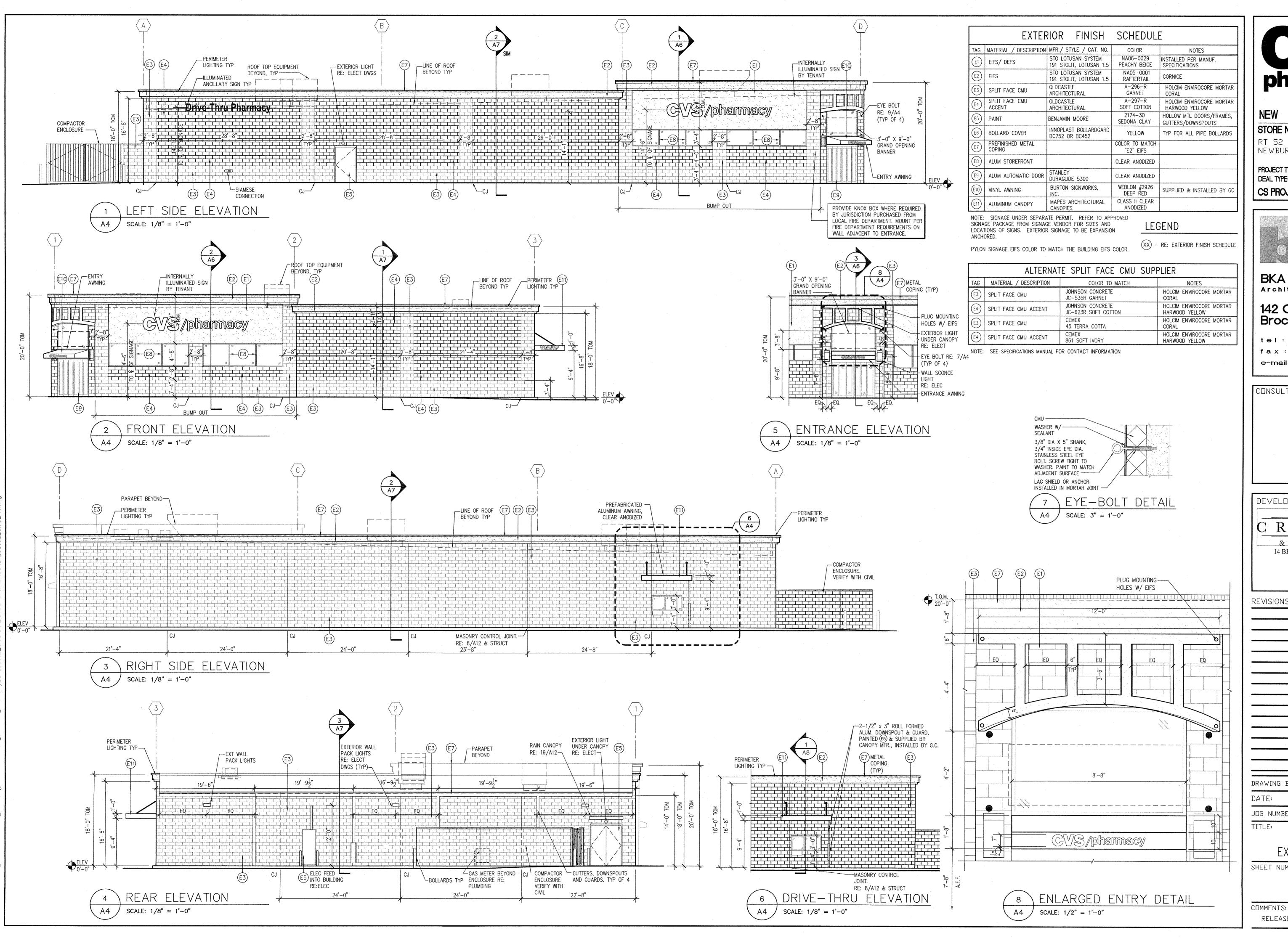
L... C. i

FLOOR PLAN & DETAILS

SHEET NUMBER:

COMMENTS:

RELEASED FOR PERMIT



pharmacy

STORE NUMBER:

RT 52 & RT 300 NEWBURGH, NY 12550

PROJECT TYPE: NEW DEAL TYPE: FEE FOR SERVICE CS PROJECT NUMBER:



BKA Architects, Inc. Architecture + Interiors

#### 142 Crescent Street Brockton, MA 02302

tel: 508.583.5603 fax: 508.584.2914 e-mail: bka@bkaarchs.com

CONSULTANT:

DEVELOPER:

CROWLEY

& ASSOCIATES 14 BREAKNECK HILL ROAD SUITE 101 LINCOLN, RI PH: 401-721-1607 FAX: 401-721-1601

**REVISIONS:** 

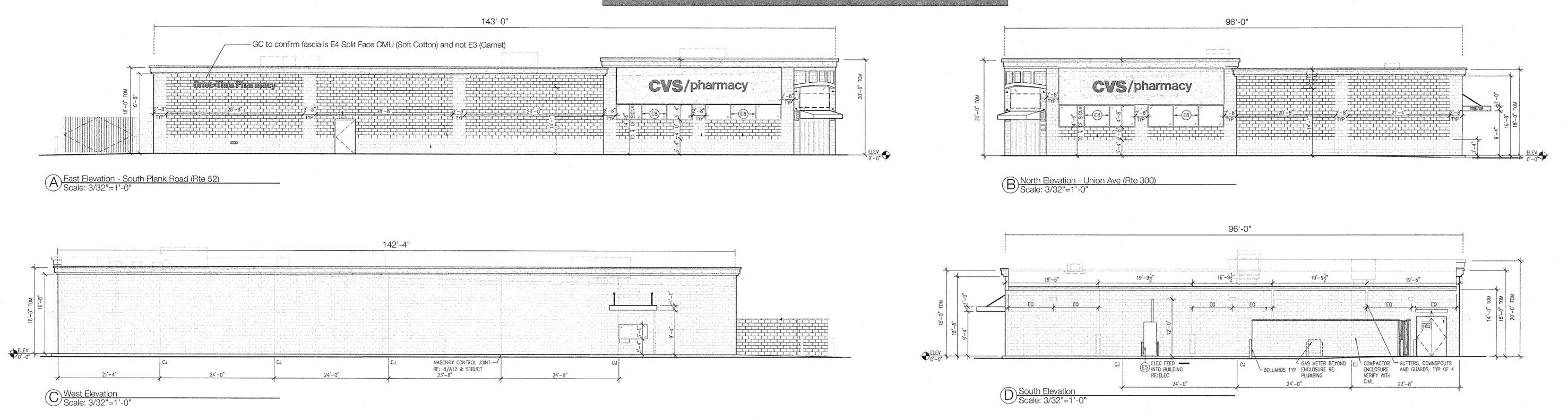
DRAWING BY: 11/19/15 JOB NUMBER: 215262

EXTERIOR ELEVATIONS

SHEET NUMBER

RELEASED FOR PERMIT

#### PROPOSED CODE SIGN PACKAGE



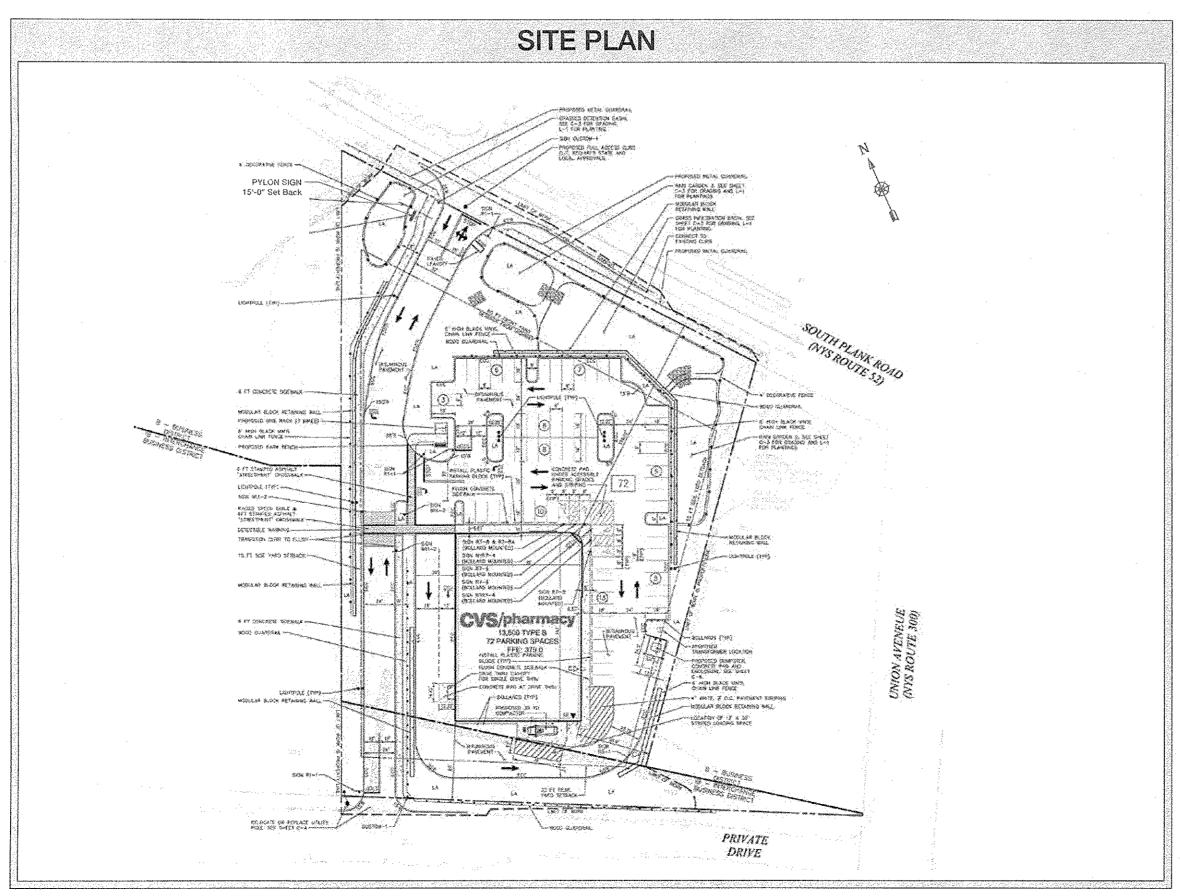
- \* TOTAL ALLOWABLE SQ/FT OF BUSINESS SIGNAGE = 176.9 SQ/FT (OR ½ OF THE TOTAL LENGTH OF STREET FRONTAGE OF THE LOT IN LINEAR FT (353.8 SQ/FT)
- \* The code does not require that directional signage be included in the total amount of allowable signage area

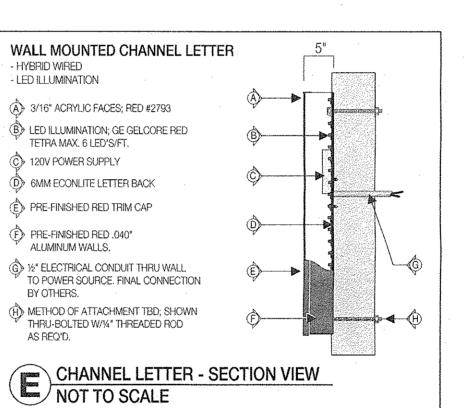
| SQUARE FOOTA          | GE CHART OF EL                             | EVATION            | SIGNS                   |                                |
|-----------------------|--|--------------------|-------------------------|--------------------------------|
|                       | SIGN TYPE & SIZE                           | HEIGHT(S)          | PROPOSED<br>SQ. FOOTAGE | TOTAL ALLOWABLE<br>SQ. FOOTAGE |
| A: EAST ELEVATION - S | OUTH PLANK ROAD                            | (RTE 52)           |                         |                                |
| GVS/pharmacy          | INTERN. ILLUM C/L<br>2'-6" H. x 20'-11" W. | 30" H.<br>17.5" H. | 52.21 SQ. FT.           |                                |
| Drive-Thru Pharmacy   | INTERN. ILLUM C/L<br>1'-6" H. x 16'-10" W. | 18" H.             | 25.00 SQ, FT.           |                                |
|                       | TOTAL .                                    |                    | 77.21 SQ. FT.           |                                |
| B: NORTH ELEVATION    | - UNION AVE (RTE 30                        | )0)                |                         |                                |
| CVS/pharmacy          | INTERN. ILLUM C/L<br>2'-6" H. x 20'-11" W. | 30" H.<br>17.5" H. | 52.21 SQ. FT.           |                                |
|                       | TOTAL                                      |                    | 52.21 SQ. FT.           |                                |
|                       | TOTAL SIGNAGE                              |                    | 129.42 SQ. FT.          | 129.42 SQ. FT.                 |

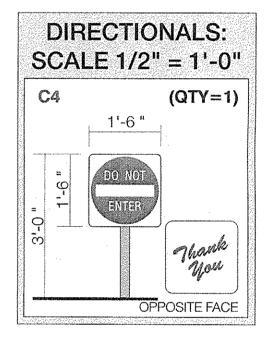
|                                | SIGN TYPE & SIZE                    | HEIGHT(S)      | PROPOSED<br>SQ. FOOTAGE | TOTAL ALLOWABL<br>SQ. FOOTAGE |
|--------------------------------|-------------------------------------|----------------|-------------------------|-------------------------------|
| CANOPY ELEVATION               |                                     |                |                         |                               |
| ORIVE-THRU<br>CLEARANCE 0"-00" | INTERN. ILLUM PUSH<br>THRU GRAPHICS | 6" H.<br>3" H. | 6.00 SQ. FT.            |                               |
|                                | TOTAL                               |                | 6.00 SQ. FT.            |                               |
| DIRECTIONALS                   |                                     |                |                         |                               |
| DO NOT ENTER (Qty. 1)          | 1'-6" H. x 1'-6" W.                 |                | 2.00 SQ. FT. (EA.)      |                               |
|                                | TOTAL                               |                | 2.00 SQ. FT.            |                               |
|                                | TOTAL SIGNAGE                       |                | 8.00 SQ. FT.            | 8.00 SQ. F1                   |

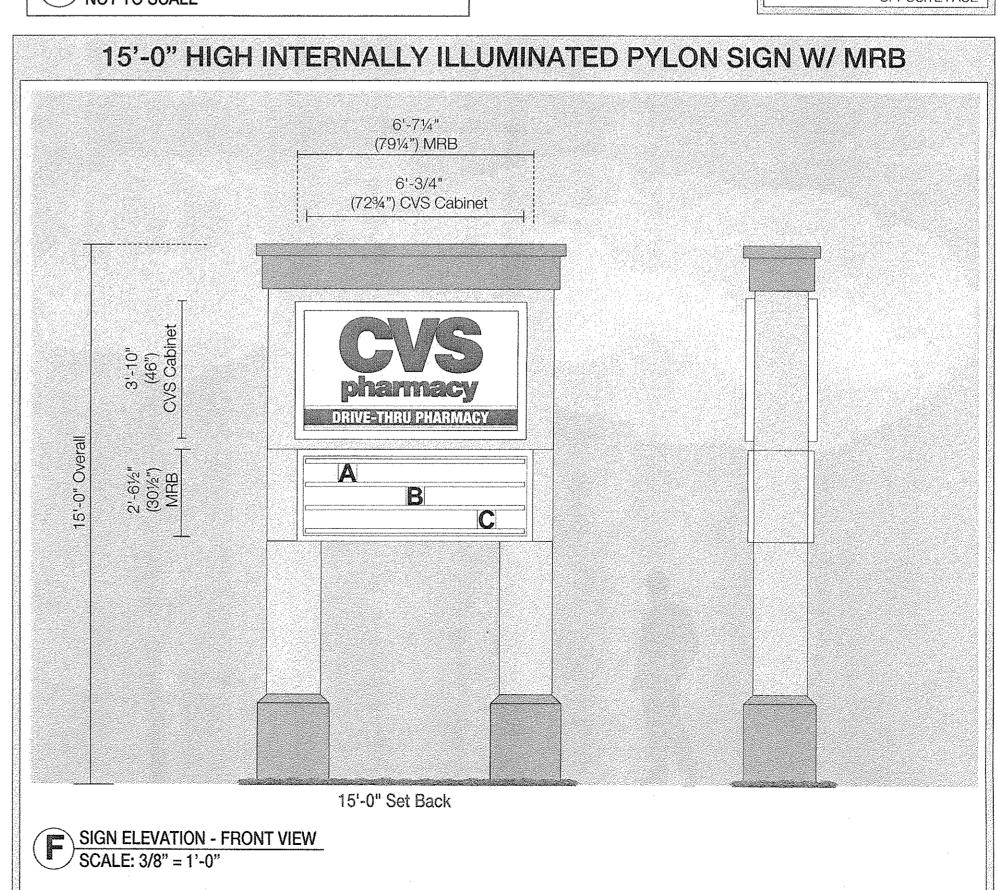
| SQUARE FOOTAGE CHART OF DIRECTIONAL SIGNS |   |                                |                                |
|---|---|--------------------------------|--------------------------------|
|   | SIZES   | PROPOSED<br>SQ. FOOTAGE        | TOTAL ALLOWABLE<br>SQ. FOOTAGE |
| PYLON                                     |   |                                |                                |
| PYLON<br>w/ MRB                           | 3'-10" H. x 6'-¾" W.<br>2'-6½" H. x 6'-7¼" W. | 23.24 SQ. FT.<br>15.40 SQ. FT. |                                |
|   | TOTAL   | 38.64 SQ. FT.                  |                                |
|   | TOTAL PROPOSED SIGNAGE                        | 176.06 SQ. FT.                 | 176.90 SQ. FT.                 |

NOTES \* BLOCKING INFO: ALL BLOCKING TO BE DONE BY OTHERS.









125 Samuel Barnet Boulevard New Bedford, MA 02745 800.544.0961 | poyantsigns.com

#### CVS/pharmacy

SWC Rte 52 & Rte 300 Newburgh, NY

Project: 11688 CVS/pharmacy Exterior Signage Package

Sales: Gary McCoy Date: 10.14.2014 Designer: NLM

This is an original unpublished drawing created by Poyant Signs,

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Revisions: 11.11.15 NLM Rev to Code Package
11.16.15 LR Rev removed C3's
& graphics on long side of canopy, new site plan 11.18.15 LR Rev added text 11.23.15 LR Rev new elev

Comments:

by Christian Potter

11.11.15 Approved Code Compliant

Approved by:

Building Signage

Date:

Sign Elevation

11688-R4



125 Samuel Barnet Boulevard New Bedford, MA 02745 800.544.0961 | poyantsigns.com

#### CVS/pharmacy

SWC Rte 52 & Rte 300 Newburgh, NY

Project: 11688 CVS/pharmacy Exterior Signage Package

Sales: Gary McCoy Date: 10.14.2014 Designer: NLM

#### Jote:

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