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**TOWN OF CARMEL**  
**PLANNING BOARD**



60 McAlpin Avenue  
Mahopac, New York 10541  
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**MICHAEL CARNAZZA**  
*Director of Code  
Enforcement*

**RICHARD FRANZETTI, P.E.**  
*Town Engineer*

**PATRICK CLEARY,**  
AICP, CEP, PP, LEED AP  
*Town Planner*

**VINCENT FRANZE**  
*Architectural Consultant*

**PLANNING BOARD AGENDA**  
**SEPTEMBER 27, 2017 – 7:00 P.M.**

**MEETING ROOM #2**

**TAX MAP #   PUB. HEARING   MAP DATE   COMMENTS**

**PUBLIC HEARING**

- |   |            |          |          |                           |
|---|------------|----------|----------|---------------------------|
| 1. Hilltop Manor Realty – 164 East Lake Blvd      | 76.22-1-5  | 09/27/17 | 07/15/17 | Public Hearing/Resolution |
| 2. NY Fuel Distributors (Coco Farms) 1923 Route 6 | 55.11-1-40 | 09/27/17 | 06/20/17 | Amended Site Plan         |

**SITE PLAN**

- |   |                          |  |          |                   |
|---|--------------------------|--|----------|-------------------|
| 3. Central Hudson Gas & Electric Corp –<br>340 Bullet Hole Road | 53.17-1-38               |  | 08/30/17 | Site Plan         |
| 4. Easter Seals New York – 97 Old Route 6                       | 55.11-1-23,24<br>25 & 27 |  | 09/13/17 | Amended Site Plan |

**MISC.**

- |   |                              |  |  |  |
|---|------------------------------|--|--|--|
| 5. Wixon Pond Estates – 243 Wixon Pond Road               | 53.20-1-19                   |  |  | Extension of Preliminary<br>Subdivision Approval |
| 6. Smajlaj, Zef – 803 South Lake Blvd                     | 75.42-1-39                   |  |  | Extension of Final Site<br>Plan Approval         |
| 7. PCSB/Mahopac Branch – 150 Route 6                      | 86.11-1-1                    |  |  | Bond Return                                      |
| 8. Gateway Summit Senior Housing – Lot 6<br>Gateway Drive | 55.-2-24.6-1<br>55.-2-24.6-2 |  |  | Extension of Final<br>Amended Site Plan          |
| 9. The Fairways Senior Housing – Lot 7<br>Gateway Drive   | 55.-2-24.8-1<br>55.-2-24.8-2 |  |  | Extension of Final<br>Amended Site Plan          |

**TOWN BOARD REFERRAL**

- |  |  |  |  |            |
|--|--|--|--|------------|
| 10. Proposed Ordinance Regarding Wireless Telecommunications |  |  |  | Discussion |
|--|--|--|--|------------|



**STONEFIELD**

engineering & design

September 20, 2017

New York State Department of Transportation  
4 Burnett Boulevard  
Poughkeepsie, NY 12603  
Attn: Gregory V. Bentley Sr., P.E.

**RE: NYSDOT SEQR #: 14-0078**  
**Proposed CoCo Farms Gasoline Station and Convenience Market**  
**Map 55.11, Block 1, Lot 40**  
**1923 U.S. Route 6**  
**Town of Carmel**  
**Putnam County, New York 10512**  
**SE&D Job No.: S-14141**

Dear Mr. Bentley:

Stonefield Engineering and Design, LLC ("Stonefield") is pleased to resubmit documents for the above-referenced project. Revisions were made to the Site Plan to address the comments issued by the Department's review letter dated September 13, 2017. The following is an itemized response to each comment:

- 1) The proposal to allow left turns into the site from Route 6 at the eastern entrance is conditionally approved. Should operational difficulties or an accident pattern develop the Department will impose a left turn ingress restriction. We require that the following note be added to the plans, called out to the eastern driveway: "OPERATION OF THE SITE EXIT DRIVEWAY IS TO BE MONITORED AFTER OPENING OF THE SITE TO ENSURE SAFE AND EFFICIENT DRIVEWAY OPERATION. IF DEEMED NECESSARY, AND AT THE SOLE DISCRETION OF THE NYSDOT, ADDITIONAL DRIVEWAY TURN RESTRICTIONS MAY BE IMPOSED IN THE FUTURE."

**Response: This comment is noted. The requested note was added to the Site Plan and is called out at the easterly driveway along U.S. Route 6.**

- 2) The channelization island between the two driveways on Route 6 must be reconstructed to facilitate two-way traffic at the eastern entrance.

**Response: As shown on the Site Plan, the easterly driveway has been designed to accommodate two-way traffic.**

- 3) No left turn egress will be permitted from either access drive on Route 6. Signage must be installed prohibiting left turns out of both driveways on the State Highway.

**Response: As shown on the Site Plan, MUTCD-compliant signage restricting left-turn egress is provided at both driveways along U.S. Route 6.**

- 4) The shoulder on Route 6 adjacent to the site must be milled and re-paved. This can be done under the required Highway Work Permit (HWP).

**Response: The Site Plan shows milling and repaving of the shoulder adjacent to the site. This improvement was requested by Mr. Rock DeNigro during earlier reviews of the Site Plan.**

- 5) It is noted that the subject proposal has no sidewalk along either frontage.

**Response: This comment is noted.**

[stonefieldeng.com](http://stonefieldeng.com)

92 Park Avenue, Rutherford, NJ 07070 201.340.4468 t. 201.340.4472 f.

- 6) A crosswalk on Route 6 would improve pedestrian safety for users of the PARC facility.

**Response:** Based on our discussions following the issuance of the Department's September 13, 2017 letter, it is Stonefield's understanding that this comment pertains to a potential midblock, unsignalized pedestrian crossing of U.S. Route 6 between the subject site and the adjacent McDonald's property to the east for the benefit of the PARC facility on the north side of U.S. Route 6. Stonefield has a concern with a midblock crossing of U.S. Route 6 given the prevailing speeds, vertical and horizontal curvature conditions (primarily east of the site near the Old Route 6 intersection), and driver expectations on this arterial roadway. The 85th-percentile speed on U.S. Route 6 near the subject site was calculated in 2015 to be 47.8 miles per hour in the eastbound direction and 44.4 miles per hour in the westbound direction; the posted speed limit on the roadway is 40 miles per hour, so the majority of drivers exceeded the speed limit when the study was performed. Introducing a midblock, unsignalized pedestrian crossing on a roadway that does not currently provide such features may violate driver expectations and give pedestrians the false sense of security that drivers will stop for them because they happen to be in the crosswalk (source: Highway Design Manual, 18.7.8). Additionally, Exhibit 18-19 in the Highway Design Manual indicates that "marked crosswalks alone are insufficient" on a two-lane arterial with an AADT between 12,000 and 15,000 vehicles per day and posted speed limit of 40 miles per hour, which are the characteristics of U.S. Route 6 in the vicinity of the subject site.

Since the PARC facility and pedestrian desire lines are existing conditions that would need to be addressed regardless of the proposed development, the applicant is not proposing a midblock, unsignalized crosswalk on U.S. Route 6. However, the applicant understands and is sympathetic to the pedestrian concerns and is willing to construct a new sidewalk (where none exists) along the south side of U.S. Route 6 between its property and McDonald's so there is a landing place for pedestrians should the Department decide to install the midblock, unsignalized pedestrian crossing with enhanced traffic safety/calming features in the future.

- 7) The proposed permit work is near a NYSDOT traffic signal, highway light, or other device with loop detection and/or buried conduit. The permittee shall locate all such underground facilities and note such on the construction plans. Damage to underground facilities are the responsibility of the permittee. Signal loops and conduit are not covered by UFPO call out and require a separate call out notification to the NYSDOT.

**Response:** This comment is noted. Note 18 was added to the Site Plan to address the above.

- 8) Please submit subsequent plans and documents for this project as well as those for any future development proposals in DIGITAL (.pdf) FORMAT -CD, DVD or Thumb drive.

**Response:** This comment is noted. Digital (.pdf) format plans are provided herein with this Comment Response Letter.

- 9) Lead Agency approval under SEQR is required in advance of permitting.

**Response:** This comment is noted.

- 10) Please reference the SEQRA number 14-0078 on all future correspondence.

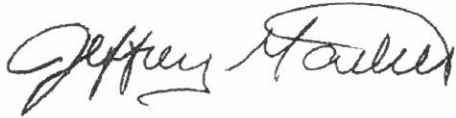
**Response:** This comment is noted.

Additionally, in support of the revisions, we have enclosed the following documents:

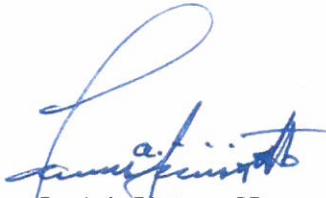
- I. Site Plan (Sheet 4), prepared by Stonefield and dated September 20, 2017.

Should you have any questions, or require any additional information, please do not hesitate to contact our office.

Best regards,



Jeffrey Martell, PE, PP, CME, LEED AP  
**Stonefield Engineering and Design, LLC**



Frank A. Filiciotto, PE  
**Stonefield Engineering and Design, LLC**

cc: Danny Porco – NY Fuel Distributors, LLC  
Leo Napior, Esq. – Harfenist Kraut & Perlstein, LLP  
Rock DeNigro – NYSDOT Putnam County Permit Engineer  
Harold Gary – Chairman, Town of Carmel Planning Board  
Craig Paepre – Vice Chairman, Town of Carmel Planning Board  
Richard Franzetti, PE – Town of Carmel Engineering Department  
Dr. John Collins, PE, PhD – Maser Consulting (Traffic Consultant to the Town of Carmel)



TABLE OF LAND USE AND ZONING			
BLOCK 1, LOT 40			
COMMERCIAL (C)			
PROPOSED USE	PERMITTED USE		
CONVENIENCE STORE AND FUELING STATION	CONDITIONAL USE		
§ 156-10 ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	40,000 SF	40,048 SF	40,048 SF
MINIMUM LOT WIDTH	200 FT	228 FT	228 FT
MINIMUM LOT DEPTH	200 FT	85 FT	85 FT (EN)
MAXIMUM BUILDING COVERAGE	30%	4.2% (1,696 SF)	13.5% (5,424 SF)
MINIMUM FLOOR AREA	5,000 SF	1,696 SF	1,824 SF (V)
MAXIMUM BUILDING HEIGHT	35 FT	<35 FT	< 35 FT
MINIMUM FRONT YARD SETBACK	40 FT	25.8 FT	25.8 FT
MINIMUM SIDE YARD SETBACK (ONE)	25 FT	75.4 FT	32.4 FT
MINIMUM REAR YARD SETBACK	30 FT	N/A	N/A

(EN) EXISTING NON-CONFORMITY  
(N/A) NOT APPLICABLE  
(V) VARIANCE

ESTIMATED NUMBER OF EMPLOYEES: TWO (2) PER SHIFT

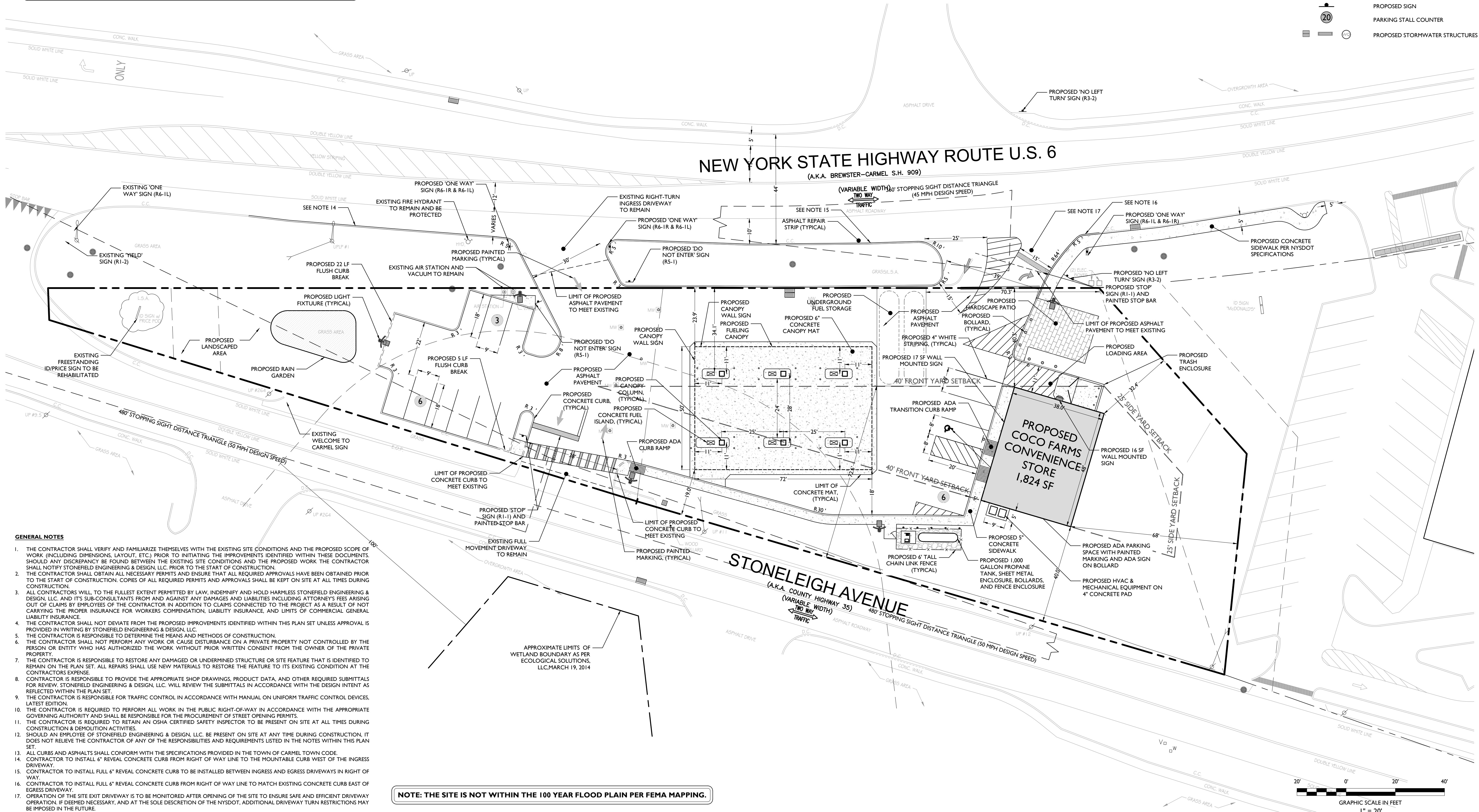
PARKING REQUIREMENT		
ORDINANCE SECTION	REQUIRED	PROPOSED
§SECTION 156-42	CONVENIENCE STORE: 1 SPACE PER 200 SF = 1,824/200 = 10 SPACES 10 PARKING SPACES REQUIRED	15 PARKING SPACES
§SECTION 156-42	PARKING STALL WIDTH: 10 FT PARKING STALL DEPTH: 20 FT	10 FT 20 FT

CONDITIONAL USE CRITERIA		
§ 156-30 AUTOMOTIVE USES	REQUIRED	PROPOSED
MINIMUM LOT AREA	20,000 SF	40,048 SF
MINIMUM LOT WIDTH	200 FT	228 FT
MINIMUM SEPARATION FROM ANOTHER GASOLINE STATION	1,000 FT	± 940 FT (EN)
NO. OF DRIVEWAYS PER 200 FT OF STREET FRONTAGE	2 MAX	COMPLIES
DRIVEWAY WIDTH	24 FT (MIN.) 36 FT (MAX.)	30 FT & 38 FT (EN)
FUEL TANK SETBACK (NON-R/W)	40 FT	(N/A)
PUMP SETBACK (R/W)	25 FT	34.1 FT

(EN) EXISTING NON-CONFORMITY  
(N/A) NOT APPLICABLE

SIGNAGE REQUIREMENTS		
ORDINANCE SECTION	REQUIRED	PROPOSED
§SECTION 156-41-C.4	NOT MORE THAN ONE EXTERIOR SIGN SHALL BE PERMITTED FOR EACH COMMERCIAL ESTABLISHMENT ON EACH WALL FACING A STREET	2 BUILDING MOUNTED WALL SIGNS AND 2 CANOPY MOUNTED WALL SIGNS
§SECTION 156-41-C.2	MAX SIGN AREA EASTERN BUILDING FACADE: 38 SF / 2 SF = 16 SF WESTERN BUILDING FACADE: 48 SF / 2 SF = 24 SF NORTHERN CANOPY FACADE: 72 SF / 2 SF = 36 SF WESTERN CANOPY FACADE: 50 SF / 2 SF = 25 SF	EASTERN BUILDING FACADE: 16 SF WESTERN BUILDING FACADE: 17 SF NORTHERN CANOPY FACADE: 10.89 SF WESTERN CANOPY FACADE: 10.89 SF
§SECTION 156-41-C.5	SIGNS ON BUILDING SHALL BE FLAT AGAINST THE EXTERIOR WALL AND SHALL NOT PROJECT MORE THAN 6" FROM THE WALL TO WHICH THEY ARE FIXED. NO SIGN SHALL PROJECT BEYOND THE TOP OR SIDE OF THE WALL TO WHICH IT IS FIXED.	COMPLIES
§SECTION 156-41-C.9	THE TOTAL AREA OF ALL SIDES OF A FREESTANDING SIGN SHALL NOT EXCEED 32 SF AND EACH SIDE SHALL NOT EXCEED A TOTAL OF 16 SF. THE TOP OF THE FREESTANDING SIGN SHALL BE NO HIGHER THAN 12 FT FROM THE GROUND AND THE BOTTOM OF THE SIGN SHALL BE NO HIGHER THAN EIGHT FT FROM THE GROUND.	TOTAL SIGN AREA OF ALL SIDES = 124.2 FT (V) TOP OF FREESTANDING SIGN: 19.2 FT (V) BOTTOM OF FREESTANDING SIGN: 6.75 FT

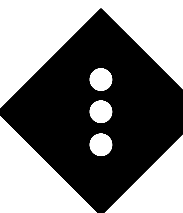
SYMBOL	DESCRIPTION
---	PROPERTY BOUNDARY
- - -	ADJACENT PROPERTY BOUNDARY
---	PROPOSED CURB
---	PROPOSED DEPRESSED OR FLUSH CURB
---	PROPOSED ADA PATH
---	PROPOSED BUILDING
---	PROPOSED CONCRETE AREA
---	PROPOSED SIGN
---	PARKING STALL COUNTER
---	PROPOSED STORMWATER STRUCTURES



- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, PRIOR TO THE START OF CONSTRUCTION.
  - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
  - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
  - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
  - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
  - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
  - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
  - THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC, WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
  - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
  - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
  - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
  - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.
  - ALL CURBS AND ASPHALTS SHALL CONFORM WITH THE SPECIFICATIONS PROVIDED IN THE TOWN OF CARMEL TOWN CODE.
  - CONTRACTOR TO INSTALL 6" REVEAL CONCRETE CURB FROM RIGHT OF WAY LINE TO THE MOUNTABLE CURB WEST OF THE INGRESS DRIVEWAY.
  - CONTRACTOR TO INSTALL FULL 6" REVEAL CONCRETE CURB TO BE INSTALLED BETWEEN INGRESS AND EGRESS DRIVEWAYS IN RIGHT OF WAY.
  - CONTRACTOR TO INSTALL FULL 6" REVEAL CONCRETE CURB FROM RIGHT OF WAY LINE TO MATCH EXISTING CONCRETE CURB EAST OF EGRESS DRIVEWAY.
  - OPERATION OF THE SITE EXIT DRIVEWAY IS TO BE MONITORED AFTER OPENING OF THE SITE TO ENSURE SAFE AND EFFICIENT DRIVEWAY OPERATION. IF DEEMED NECESSARY, AND AT THE SOLE DISCRETION OF THE NYSDOT, ADDITIONAL DRIVEWAY TURN RESTRICTIONS MAY BE IMPOSED IN THE FUTURE.
  - THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND TRAFFIC SIGNAL, HIGHWAY LIGHT, OR OTHER DEVICES WITH INTERCONNECT CABLE, DETECTOR CABLE, CONDUIT, AND UNDERGROUND ACCESSORY EQUIPMENT BEFORE CONSTRUCTION AND SHALL REPLACE ALL INTERCONNECT CABLE, DETECTOR CABLE, CONDUIT, AND UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION.

NOTE: THE SITE IS NOT WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA MAPPING.

**STONEFIELD**  
engineering & design



**NY FUEL DISTRIBUTORS, LLC**

**PROPOSED CONVENIENCE STORE AND FUELING STATION**

BLOCK 1, LOT 40  
1923 U.S. ROUTE 6  
TOWN OF CARMEL  
PUTNAM COUNTY, NEW YORK

JEFFREY A. MARTELL, P.E.  
NEW YORK LICENSE No. 086502  
LICENSED PROFESSIONAL ENGINEER

**STONEFIELD**  
engineering & design, llc.

SCALE: 1" = 20' PROJECT ID: T-15086

TITLE:

SITE PLAN

DRAWING:

C-4



Engineers  
Planners  
Surveyors  
Landscape Architects  
Environmental Scientists

18 Computer Drive East  
Suite 203  
Albany, NY 12205  
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September 9<sup>th</sup>, 2017

Town of Carmel  
Planning Department  
Town of Carmel Town Hall  
60 McAlpin Ave  
Mahopac, NY 10541

In response to the initial comments offered by various Town offices after their review of the S-M Line Gas Distribution Reinforcement Project, Maser Consulting responds with the following information.

**Town Code Enforcement Office:**

The comments noted below correspond to comments received from the Code Enforcement Officer through memos, in-person meeting and phone conversations:

Memo dated June 14, 2017

*No Comments.*

**Town Engineer's Office:**

The comments noted below correspond to comments received from the Town Engineer through memos, in-person meeting and phone conversations:

Memo dated June 21, 2017:

General Comments:

1. Permits from the following would appear necessary:
  - a) New York State Department of Transportation
  - b) Putnam County Highway (Highway work permit)
  - c) New York State Department of Environmental Conservation (wetlands and, stormwater)
  - d) Town of Carmel Highway (Driveway and work within right of way)
  - e) Town of Carmel Environmental Conservation Board (wetlands)

***Response: We agree with this list. Central Hudson will be applying to various agencies in October to obtain necessary permits. Copies of those permits, along with a comprehensive list of permit expiration dates will be supplied to the Town prior to construction. It is anticipated all permits will be in place by the end of 2017.***

2. Should any public improvements be deemed necessary as part of the development of the tract, a Performance Bond and associated Engineering Fee must eventually be established for the work. This includes erosion and sediment control and permanent stormwater management practices.



**Response: Central Hudson will prepare a Letter of Undertaking in lieu of a Construction Performance Bond. Various inspection fees will be paid to the Town. Central Hudson will require notification of Inspection Fee amounts so they may be paid.**

Pressure Regulator System – 340 Bullet Hole Road:

1. Additional silt fence should be provided along the west and south sides of the property.

**Response: Additional Site Fence has been added to revised plans.**

2. The applicant does not address stormwater runoff from the site. There is concern about additional runoff entering onto Bullet Hole Road.

**Response: Under NYSDEC's GP-0-15-002 permit, Appendix B Table 1, this project is not required to address post construction stormwater management. However, we propose the use of open graded stone at the pressure regulator station to help infiltrate stormwater runoff that may be generated from the site.**

3. The applicant now proposes work in the Town of Carmel Right of Way (R.O.W.) and therefore, approval is required from the Town of Carmel Highway Department.

**Response: Central Hudson and Maser Consulting has met separately with the Town Highway Department to address their concerns. The project will be applying for Town road opening permits.**

4. Available sight distances at each driveway location should be specified on plan. Any clearing along the edge of the roadway R.O.W. that may be necessary to assure appropriate sight distances are provided, should be identified.

**Response: Site Distance information will be provided.**

5. Driveway cross-sections should be added to the plan.

**Response: Typical driveway cross section details have been provided on revised plans.**

6. It is recommended that a gate be provided at the entrance to deter unwanted vehicle access to the site.

**Response: During in-person meetings with various Town offices, this comment was retracted by the Town. Please note, there will be a gate further into the site to allow vehicles to clear the roadway and park before they encounter the gate.**

7. All re-grading required to accomplish the intended development must be shown.

**Response: Grading has been provided on revised plans.**

8. Additional screening plants should be provided along the west side of the property.



***Response:*** During in-person meetings with various Town offices the Town Planner stated the proposed plantings were sufficient. No further plantings have been provided.

9. All plantings shall be installed per §142 of the Town of Carmel Town Code.

***Response:*** Notes have been added to the revised plans to reflect this comment.

**Gas Line Installation:**

1. A detailed traffic safety plan should be provided for the project. Copies should be provided to the Putnam County and Town of Carmel Highway Departments for review/approval.

***Response:*** A Traffic and Detour Plan have been provided in revised plans. This plan will be submitted to NYSDOT and Putnam County as part of their permitting process.

**Town Planning Office:**

The comments noted below correspond to comments received from the Town Planner through memos, in-person meeting and phone conversations:

Memo dated June 28, 2017

**Site Plan Review Comments:**

1. Highway work permits will be required for the gas line installation from the NYSDOT, Putnam County Highway Dept. and Town Highway Dept.

***Response:*** Central Hudson will be applying to various agencies in October to obtain necessary permits. Copies of those permits, along with a comprehensive list of permits expiration dates will be supplied to the Town prior to construction. It is anticipated all permits will be in place by the end of 2017.

2. Details of the proposed evergreen landscaping at the regulator station is required.

***Response:*** Tree Planting details, and a revised planting plan have been provided on revised plans.

3. It is recommended that vinyl slating be installed in the chain link fence to screen the equipment. What type of gate is proposed?

***Response:*** During in-person meetings with various Town offices, this comment was retracted by the Town. Vinyl Slating would create an issue for Central Hudson's security inspections. A black coated chain link fence will be provided instead of slats. Regulator Station equipment will be painted a dark green color to help mitigate visual impacts of the site. A double-leaf, chain-link swing gate is proposed.





4. It appears that razor ribbon or barbed wire is proposed along the top of the fence. As the site is located within a residential area, are other less menacing security measures available?

**Response:** *Barbed Wire is no longer proposed. Fencing will be increased from 6-ft to 8-ft tall to mitigate security concerns.*

5. Is any site lighting proposed?

**Response:** *No, site lighting is not proposed.*

6. Clarify if the operation of the regulator station will routinely produce odor, noise or emissions of any type.

**Response:** *No routine emissions will be produced by the new regulator station. Similar to the regulator station located at Stillwater Road in the Town of Carmel, the new regulator station may produce an intermittent, low-level "whooshing" hum sound during cold winter periods when natural gas throughput is high. A high-efficiency, low-sound natural gas heater at the new regulator station may operate intermittently during similar cold winter periods, expelling its exhaust from an exhaust stack within the regulator station.*

#### **Environmental Review Board:**

The comments noted below correspond to comments received from the Environmental Review Board on July 20<sup>th</sup>, 2017. The 5-member ECB lacked a quorum due to two members being unable to attend. Therefore, the ECB held a semi-informal meeting for our team to discuss the project and receive comments. However, the ECB was unable to take any official actions without a quorum in place.

#### **ECB Meeting on July 20, 2017:**

1. The project's SWPPP and notes on the Plans need to include provisions for Spill Kits (multiple) to be kept on the construction site at all times.

**Response:** *Notes concerning Spill Kits have been provided on revised plans and within the revised SWPPP.*

2. The project's SWPPP and notes on the Plans need to include provisions for Equipment Fueling Plans.

**Response:** *Notes concerning Fueling Plans have been provided on revised plans and within the revised SWPPP.*

3. In the event equipment is stored overnight, in any area not on asphalt or protected from spills, it will need to be placed on top of a "poly" mat to protect from leaks.

**Response:** *Notes concerning this requirement have been provided on revised plans. Please note it is the intent of this project to typically mobilize and demobilize the work zone at the end of each day. Construction Equipment should*



*typically be stored in the Staging Area on existing pavement although any equipment that is stored along the project route will be stored on poly sheeting.*

4. The Construction Sequence Plan provided in the SWPPP needs to be revised to provide more detail, including approximate dates for construction and how the gas line will be constructed (linear or varying sections). The construction sequence also needs to be provided to the ECB as its own standalone document.

***Response: Construction Sequence Plan has been revised in the SWPPP. A stand-alone copy is also provided in this submittal. Please note, at the Pre-Construction meeting the Contractor (yet to be retained) will provide a construction schedule; at such time, the Construction Sequence Plan will be updated.***

5. The applicant will need to provide a finalized SWPPP to the ECB with Town Engineer signed approval.

***Response: During in-person meetings with various Town offices this comment was discussed. It is our understanding this is not required for the ECB to accept our wetland permit application. It is however required before the ECB signs the permit. We will coordinate with the Town Engineer and other involved boards so a finalized SWPPP is prepared before the ECB issues their wetlands permit.***

6. The ECB will need Certifications of Clean Fill to be used on site.

***Response: A note will be added to the plans instructing the contractor of this requirement. Certifications will be provided during construction.***

7. All other environmental permits need to be completed and evidence of permits provided to the ECB.

***Response: During in-person meetings with various Town offices, this comment was discussed. It is our understanding that other environmental permits are not required for the ECB to accept our wetland permit application. However, it is required before the ECB issues their permit. We will coordinate with other permitting agencies to provide proof the project has begun a permitting process so ECB can accept our application. Once other environmental permits have been received, a copy of each will be forwarded to the ECB.***

8. All conditions the ECB places on the project must be reflected in the form of notes on the Final Plans.

***Response: To date, ECB comments have been added to revised plans. Any further conditions from the ECB will also be added to plans.***

9. The ECB requires silt fencing to be placed in front of construction path and then inspected for proper installation. The contractor will not be allowed to move forward with excavation and construction until silt fence is installed properly and inspected.

***Response: Notes concerning silt fence inspections have been added to the SWPPP.***

**Town Highway Department:**

The comments noted below correspond to comments received from the Superintendent of Highways through e-mails and in-person meetings:

**Meeting Held on Aug 22, 2017**

1. Culverts and how you plan work around them – additional details will be required;

**Response:** *Work around most culverts will be by open-cut. Details have been provided on revised plans for culvert crossings. Also, various tables have been provided on revised plans to show locations of known culvert crossings, including the municipal ownership (Town, County, State) of each.*

2. Road crossing permits (note there are 17 which you have identified on the drawings, however we count ~ 14 more once you start adding the various stubs).

**Response:** *Central Hudson will be applying to various agencies in October to obtain necessary permits. A table has been provided in revised plans to inventory and show locations of road crossings.*

3. Road bonds;

**Response:** *Central Hudson will prepare a Letter of Undertaking in lieu of a Construction Performance Bond. The Letter of Undertaking will stay in effect 1 calendar year after the project is completed, as requested by the Superintendent of Highways.*

4. How road work is being performed and the associated restoration;

**Response:** *The project will generally be constructed in a linear fashion, starting at Bullet Hole Road and ending at NYS Route 6. Full restorations (pavement or turf) are proposed. This includes a full asphalt section (Top, Binder, Base & Subbase) at all road openings. As discussed in the meeting, Wixon Pond Road will be restored with Binder Asphalt only. The Road will be paved (or overlaid) by Town forces at a later date. Central Hudson and the Town Highway Department will determine a mutually acceptable fee that Central Hudson will submit to the Town Highway Department in lieu of Central Hudson completing this task.*

5. Staging area(s) location(s)

**Response:** *The Staging area for this project is located at 870 NYS Route 6. No Staging areas are proposed along the project limits.*



6. Protection and management of traffic (no plan has been provided). The Town needs to receive a traffic plan that includes any detours (minor/major) or road closures with all the appropriate signage that would be provided.

**Response:** *A Work Zone Traffic Control Plan (“Details”) was provided in previous project plan submittals. However, during the meeting it was noted the Superintendent of Highways did not receive a set of project plans to review. This submittal includes an extra set of plans specifically for the Superintendent of Highway, and now includes a Detour Plan, Road Closure Plan and Sign Text Detail Plan along with the pre-existing Work Zone Traffic Control Plan (“Details”).*

7. A Noise mitigation plan will be required.

**Response:** *Noise mitigation notes have been added to revised plans.*

END



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Landscape Architects  
Environmental Scientists

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Suite 203  
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F: 518.459.3284  
www.maserconsulting.com

## Intersection Sight Distance Analysis

Project: S-M Gas Line

Location: Regulator Station Driveway onto Bullet Hole Road

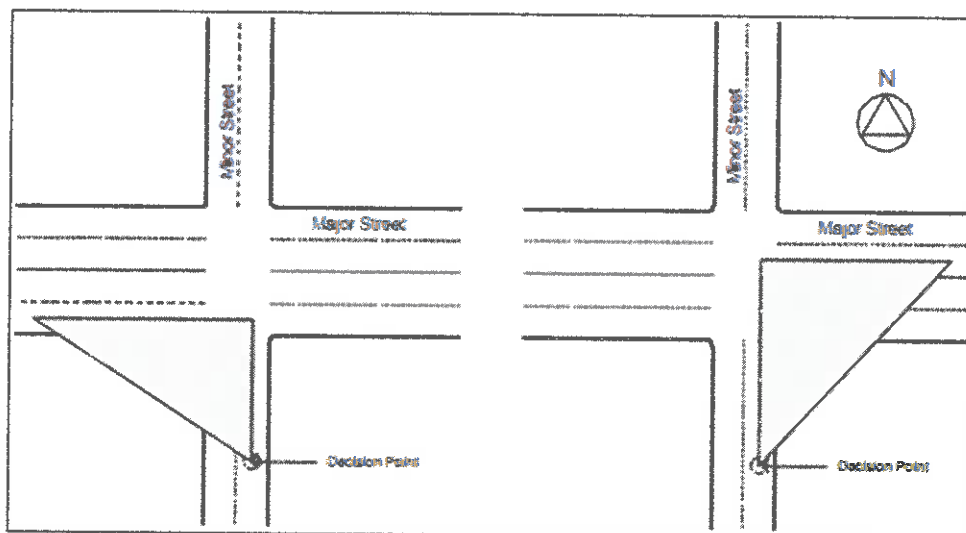
Town: Town of Carmel

Code: Requires 200-ft of Sight Distance per Town's Driveway Permit

### 1.0 Sight Distance Methodology

A typical intersection is divided into areas between each leg known as quadrants. There may be three quadrants, such as for a "T" intersection, or four, such as for a four-legged intersection. Sight triangles are the specified areas along an intersection's approach legs and across the included corners (see Figures 1.1 per AASHTO, Green Book, 2001). These areas should be clear of obstructions that might block a driver's view of conflicting vehicles or pedestrians. The two types of sight triangles are approach sight triangles and departure sight triangles (per AASHTO, Green Book, 2001)

Approach sight triangles provide the driver of a vehicle approaching an intersection an unobstructed view of any conflicting vehicles or pedestrians. These triangular areas should be large enough that drivers can see approaching vehicles and pedestrians in sufficient time to slow or stop and avoid a crash. Approach sight triangles are illustrated in Figure 1.1.



*Figure 1.1 – Typical Sight Triangles*

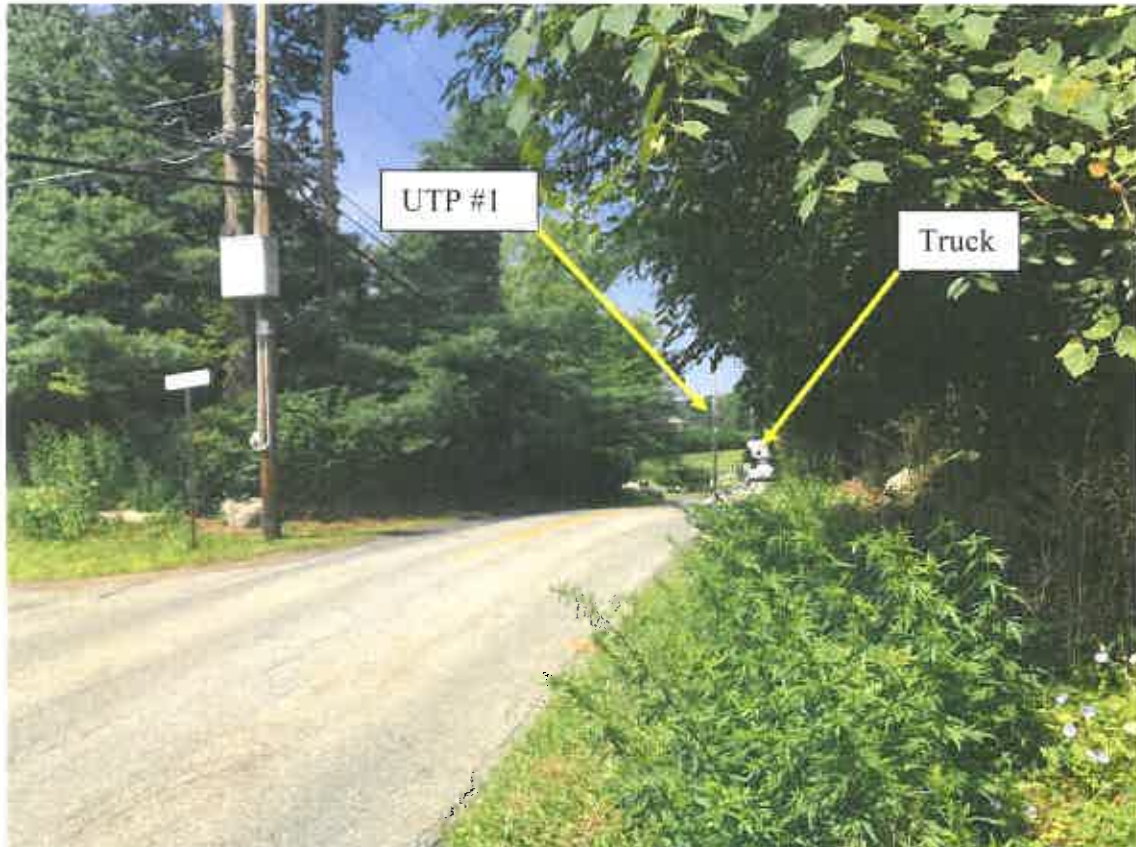
### 2.0 Intersection Location:

As part of the S-M Gas Line Distribution Reinforcement project, a gas regulator station will be built at 340 Bullet Hole Road. The intersection to be analyzed is a proposed driveway that will provide an egress for the regulator station from Bullet Hole Road. An attached sketch shows the location and sight distance measurements.



***Figure 2.1 – New Intersection Location***

To measure the existing Intersection Sight distance at the location of the proposed driveway, Maser Consulting took 2 pictures looking in either direction on Bullet Hole Road. Objects that were visible in the pictures were compared to the project survey, and distance measurements were derived. The clearest viewable objects were determined to be existing utility poles within the Right of Way of Bullet Hole Road.



***Figure 2.2 – View from Proposed Driveway looking west on Bullet Hole Road***



Sight distance to the west was measured at 246.39 ft. to existing utility pole #1 shown in Figure 2.2. At the time, the picture in Figure 2.2 was taken a Ryder rental truck was approaching the site. It can be seen from the proposed driveway location at a farther distance than utility pole #1. However, its location cannot be compared to the project's survey. It is estimated to be approximately 275 ft. in the background from the proposed driveway.



***Figure 2.3 – View from Proposed Driveway looking east on Bullet Hole Road***

Sight distance to the east was measured at 359.25 ft. to existing utility pole #4 shown in Figure 2.3. On the opposite side of Bullet Hole Road, a mailbox and existing driveway can be seen in the middle-ground of Figure 2.3. This existing driveway is approximately 200 ft. from the proposed driveway location.

In the attached Sight Distance Sketch, the Town's required 200 ft sight distance triangles are shown. This sketch, and Figures 2.2 & 2.3 also included on the sketch demonstrate existing sight distance exceeds the Town's requirements.



### **3.0 Conclusion**

Sight distance measurements show the proposed driveway for 340 Bullet Hole Road will meet and exceed the requirements of 200 ft. per Town of Carmel's code. In proposed conditions, the sight distance may improve when existing brush/vegetation in the ROW in front of 340 Bullet Hole Road is removed. Proposed landscaping trees will be set approximately 12 ft. into the property from the edge of pavement and therefore, should not hinder intersection sight distances.

Should you have any questions, please feel free to contact me at 518-459-3252, or via e-mail: [dfarnan@maserconstulting.com](mailto:dfarnan@maserconstulting.com).

Sincerely,  
MASER CONSULTING P.A.



Daniel Farnan, PE, CPESC, CPSWQ  
Senior Engineer


Enclosures – Sight Distance Sketch

R:\Projects\2015\15000624A\Calculations\Intersection Sight Distance\Intersection Sight Distance Letter.docx



UTP #1

**EXISTING SIGHT DIS**  
**MEASURES: 2**



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DANIEL A. FARNAN

NEW YORK, LICENSED PROFESSIONAL ENGINEER - LICENSE NUMBER 092510-1

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PRESSURE REGULATOR  
STATION  
FOR  
CENTRAL HUDSON




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SECTION 38

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PUTNAM COUNTY  
STATE OF NEW YORK



ALBANY OFFICE

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Suite 203  
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Phone: 518.459.3252  
Fax: 518.459.3284

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	06/12/17	PAH	DAP

PROJECT NUMBER	DRAWING NAME
1500N21A	C-LATT

SHEET TITLE

SIGHT DISTANCE PLAN

SHEET NUMBER

01 OF 01



## 7.0 - Construction Sequence

What is the function of the construction activity?

- ☐ Residential      ☐ Commercial      ☐ Industrial      ☐ Road Construction      ☒ Linear  
Utility  
☐ Other (please specify):

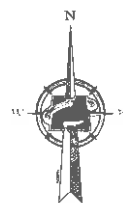
Estimated Project Start Date: 03/01/2018

Estimated Project Completion Date: 10/01/2018

Estimated timeline of activity	Permitting, Construction Activity and BMP Descriptions
10/01/2017 - 01/31/2018	<b>Permitting</b> 1. Obtain all Town, State & Federal Permits and Approvals 2. Bid and Award Project 3. Obtain all signatures from Town for MS4 and NOI signoff. 4. Submit NOI
01/31/2018 - 03/31/2018	<b>Pre-Construction Phase</b> 1.If requested by the town, hold a Pre-Construction Meeting with Contractor, CHGE, Town and any other agency necessary to attend. 1.A) All parties required to sign the SWPPP document do so. Signed copy of the SWPPP document shall remain on site until the project has ended. 2. Finalize Construction Schedule and Share with involved Agencies 3. If requested by the town, Hold Public Open House to review the project. 4. Staging Area – Install: temporary fencing, silt fencing (in turf), fueling area, spill kits. 5. Post all Permits at Staging Area. Post NOI and store copy of SWPPP in conspicuous location for weekly inspection. 6. Import & Stock Pipe materials. Mobilize Equipment. 7. Perform necessary Tree Clearing prior to Endangered Species window. 8. Install silt fencing at regulator station site. Begin clearing and grubbing, grading, and installation of access road for Pressure Regulator Station. 9. Designate a Qualified Inspector for mandatory SWPPP inspections, and begin weekly inspections.



04/01/2018 - 07/01/2018	<b>Infrastructure Construction</b> <ol style="list-style-type: none"><li>1. Install Work Zone Traffic Controls in locations where trenching will commence.</li><li>2. Install perimeter silt fencing ahead of trenching. Silt Fence to be inspected by Town before trenching may commence.</li><li>3. Excavate and install new gas main and regulator stations.</li><li>4. Install Surface Restoration (Turf or Pavement)</li><li>5. Sweep road in work zone at end of each day.</li><li>6. Conduct weekly Inspections by a Qualified Inspector. Address any issues from inspections</li></ol>
07/01/2018 - 09/01/2018	<b>Infrastructure Construction with Road Closures</b> <ol style="list-style-type: none"><li>1. Install Traffic Controls for Detours</li><li>2. Install Work Zone Traffic Controls in locations where trenching will commence.</li><li>3. Install perimeter silt fencing ahead of trenching. Silt Fence to be inspected by Town before trenching may commence.</li><li>4. Excavate and install new gas main and regulator stations.</li><li>5. Install Surface Restoration (Turf or Pavement)</li><li>6. Conduct weekly Inspections by a Qualified Inspector. Address any issues from inspections</li></ol>
09/01/2018 - 10/01/2018 -	<b>Finalize Construction, Final Stabilization</b> <ol style="list-style-type: none"><li>1. Construct any remaining Gas Infrastructure sections.</li><li>2. Inspect all previously restored Turf areas and if necessary, re-seed &amp; mulch to achieve final stabilization.</li><li>3. Remove Silt Fence and other Sediment Controls.</li><li>4. Demobilize the staging area, safely remove portable fueling equipment, remove temporary fencing, remove silt fencing.</li><li>5. Conduct final site inspection by a Qualified Inspector or Professional.</li><li>6. File the Notice of Termination.</li></ol>
10/01/2018 - 10/01/2019 -	<b>Long-Term monitoring</b> <ol style="list-style-type: none"><li>1. Monitor Work zones throughout all project area for issues with grass/landscaping until the end of Letter of Undertaking Terms.</li><li>2. Fix/reseed any areas where grass/landscaping did not fully establish from prior disturbances.</li><li>3. Maintain site landscaping at pressure regulator station in accordance with Town Codes.</li></ol>



The diagram is a technical sketch of a road area, labeled 'BULLET HOLE ROAD' at the bottom. It shows a road with a 'WHEEL PATH' and a 'PASSENGER VEHICLE' (labeled 'AARONTO PASSENGER VEHICLE 7" 1947 x 7-11'). The road is bordered by trees and structures. Key labels include: '16" CHERRY' at the top right, '8" MAPLE' below it, '16" MAPLE' further down, 'UNMANICURED WILLOW' to the right, '12" CHERRY' at the bottom right, '15" HODGKY' at the bottom left, and '15" HODGKY' at the bottom left. The road is labeled 'BULLET HOLE ROAD' at the bottom. The diagram includes various measurements and labels for trees and structures.

$$1^n = 25^n$$

	PROPOSED GAS MAIN
	EXISTING GAS MAIN
	PROPOSED SILT FENCE
	PROPERTY LINE
	HIGHWAY BOUNDARY LINE
	OVERHEAD WIRES
	EDGE OF INCULCIDER (PAVEMENT)
	100 FT WETLAND BUFFER
	FLAGGED WETLAND LINE
	TIE LINE
	STONE WALL
	FENCE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	SURVEY MONUMENT
	MANHOLE
	CATCH BASIN
	HYDRANT
	SIGN
	UTILITY POLE AND GUY WIRE
	WETLAND FLAG AND/OR D. NUMBER
	PROPOSED TREE PLANTING

CB = CATCH BASIN  
DI = DRAIN INLET  
SMH = SANITARY MANHOLE  
DMH = DRAIN MANHOLE  
EGA = EDGE OF ASPHALT  
LP = LIGHT POLE  
CO = CLEAN OUT  
GM = GAS METER  
OHV = OVERHEAD WIRES  
EM = ELECTRIC METER  
FIE = FINISHED FLOOR ELEVATION  
LS = LANDSCAPING  
UTP = UTILITY POLE  
MBX = MAILBOX  
CIP = CAST IRON PIPE  
CMP = CORRUGATED METAL PIPE  
HDPH = HIGH DENSITY POLYETHYLENE  
CRS = CAPPED REBAR SET  
RTBS = REBAR TO BE SET

1" = 20'



\*FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

NEARBY EXISTING DRAINAGE SHALL BE MAINTAINED AND OPEN AT ALL TIMES.

REQUIREMENT	REQUIRED	EXISTING	PROPOSED
LOT AREA	120,000 SF	276,475 SF	114,400 SF
LOT COVERAGE	9.0% MIN.		2%
LOT WIDTH	200 FT	VARIABLE, 85 FT FRONTAGE	VARIABLE 85 FT FRONTAGE
LOT DEPTH	400 FT	3,300 FT	3,300 FT
FRONT YARD SETBACK	40 FT	=	NO IMPROVED BUILDING OR STRUCTURE
SIDE YARD SETBACK	20 FT	=	NO IMPROVED BUILDING OR STRUCTURE
REAR YARD SETBACK	40 FT	=	NO IMPROVED BUILDING OR STRUCTURE
LANDSCAPING BUFFER	10 FT	=	NO IMPROVED BUILDING OR STRUCTURE
HEIGHT	35 FT		80 FT TO WEST, 50 FT TO EAST 7 FT

\* NO FULL-TIME OR PART-TIME EMPLOYEES REQUIRED FOR SITE. SITE WILL ONLY BE ACCESSED FOR PERIODIC INSPECTION AND MAINTENANCE. DURING SUCH INSPECTIONS THE SIDE DRIVE CAN ACT AS OFF-STREET PARKING

1. ALL SOIL, EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR BY THE PROPER PERSONNEL, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREA WILL BE LEFT EXPOSED MORE THAN SEVEN (14) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING IF THE SEASON PERMITS THE ESTABLISHMENT OF TEMPORARY COVER. THE DISTURBED AREAS SHALL BE SEEDING AND MAINTAINED WITH MOW OR EQUIVALENT, ATED AT LEAST TWO (2) TIMES PER ANNUM, ACCORDING TO STATE STANDARDS.
3. PERMANENT VEGETATION TO BE SEED OR SOIL COVERED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MOUNDING IS REQUIRED ON ALL SLOPES.
4. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
5. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
6. UNLIMTED DRAINAGE IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DRAINAGE OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DRAINAGE METHODS USED MUST BE IN ACCORDANCE WITH STATE STANDARDS.
7. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR DUSTION CONTROL.
8. PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES. ALL SOIL, WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR DURING RAIN, MUST BE REMOVED IMMEDIATELY.
9. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR SOIL, EROSION AND SEDIMENT CONTROL.
10. DURING CONSTRUCTION ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT BROWN OR CONTROL SEDIMENT RUNOFF THESE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER.
11. ALL TEMPORARY, STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED WHEN ALL CONSTRUCTION ACTIVITY IDENTIFIED IN THE SUPPLY HAS BEEN COMPLETED. ALL AREAS OF DISTURBANCE HAVE ACHIEVED FINAL STABILIZATION.

\*FINAL STABILIZATION - MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.

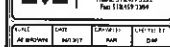


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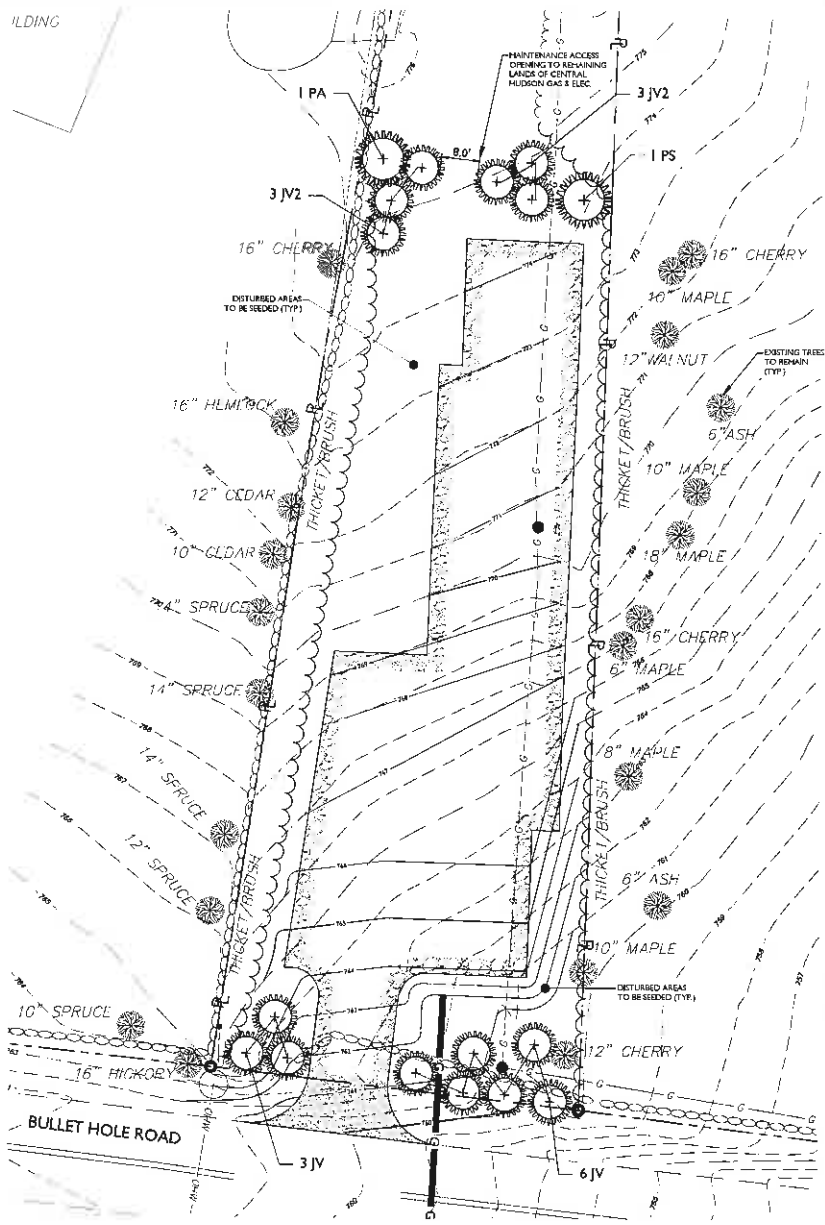
TOWN OF CARMEL  
PUTNAM COUNTY  
STATE OF NEW YORK



### DIMENSION PLAN

1 of 3





**SITE LANDSCAPE PLAN**  
1" = 10'

**GENERAL PLANTING NOTES:**

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR THE LOCATION OF UTILITIES AND TRADING AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR LOCATIONS. CONSULT PRIOR TO PLANTING INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
3. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERIES STANDARD FOR NURSERY STOCK. ON THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED GROWN AND PROTECT THE TREE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVE THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO TREE SPECIES OR VARIETY WITHOUT WRITTEN PERMISSION OF THE DESIGNATED TOWN OF CARMEL, NYS IN THE WRITTEN RECORD OF THE PLANTING MATERIAL. ANY PLANT MATERIAL MUST BE DOCUMENTED.
5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BEDS SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
6. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANTING SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
7. ALL PLANT MATERIAL SHALL BE PROPERLY BRIDGED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS AND IN ACCORDANCE WITH SECTION 142 OF THE TOWN OF CARMEL CODE. CUT AND REMOVE SITE MATERIAL FROM TOP OF BENCH OR OFF THE ROOT BALL. WIRE BASKETS AND NON LITE BURLAP SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING THE PLANT PIT.
8. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART BACKFILL OF CORNELL FILL AND TWO PARTS NATURAL FILL. SET SOIL CONDITIONS DURING PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" DEPTH.
9. ALL PLANT MATERIAL SHALL BEAT THE SAME RELATION TO FINISHED GRADE AS IT ENTERS EXISTING GRADE AT NURSERY.
10. OVERHEAD PLANTING PERIOD: DECEMBER 1 TO JANUARY 15 AND OCTOBER 15 TO DECEMBER 15. CONSIDERABLE APRIL 1 TO JUNE 15 AND SEPTEMBER 1 TO NOVEMBER 15. TREES SHALL NOT BE PLANTED BETWEEN MAY 15 AND SEPTEMBER 15 WITHOUT SPECIFIC AUTHORIZATION OF THE PLANNING BOARD.
11. NOTYET INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO MAINTAIN THEIR ALIGNMENT, GROWTH AND SURVIVAL OF ALL PLANTS.
12. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER THE DATE OF FINAL ACCEPTANCE. ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR RELEASE, SPECIES AND NO. TO THE OWNER.
13. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 12" LAYER OF TOPSOIL IN ALL PLANTING AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL ANALYSIS SHALL BE CONDUCTED AT THE CONTRACTOR AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED. SOIL PH SHOULD BE 5.5-6.5.
14. ALL DISTURBED LAYERS SHALL BE STABILIZED WITHIN 30 DAYS OF THE DATE OF THE LANDSCAPE PLANS. TEMPORARY SEEDING AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE USNR NOTES ON THE DATE THEY ALL DISTURBED LAYERS SHALL BE TOPSOILED WITH GRADES, SEEDING AND FERTILIZED.
15. ALL PLANTING BEDS SHALL RECEIVE 2" OF SHREDDED HARDWOOD BARK MULCH (COLOR: BLACK).
16. ALL EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY EROSION FENCING. ALL FENCING SHALL BE PLACED OUTSIDE THE BOUNDARY OF THE CANOPY. ALL TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE PROTECT FENCING SHALL BE INSTALLED WITHIN 10' OF THE CANOPY OF CONSTRUCTION. STAKING OR CLEARING ALL EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW BUILDING SHALL BE PROVIDED AND TOPSOILED TO REMOVE ALL DEAD, DISEASED OR DAMAGED BRANCHES.
17. ALL PLANTING BEDS (VIRG, TYPIC, RUBBER HOSE, BACKFILL, ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTIES TO BE LEFT IN A MOST ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.

**PLAN NOTE**

1. THESE PLANS ARE TO BE USED FOR LANDSCAPE PURPOSES ONLY. AREA TO SHEET 430A GENERAL REVISIONS AND DIMENSIONS.

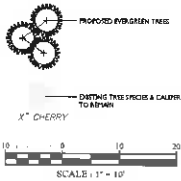
**LANDSCAPE NOTES**

1. LOCATIONS OF ALL PLANT MATERIAL AND PLANTING BEDS OUTLINES TO APPROXIMATE AND MAY VARY DUE TO THE FINAL LOCATIONS OF THE IMPROVEMENTS.
2. FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BEDS OUTLINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT AND/OR DESIGNATED TOWN OF CARMEL, NYS REPRESENTATIVE.
3. ALL AREAS WITHIN THE PLANTING BED LINES SHALL BE MULCHED WITH 2" OF SHREDDED HARDWOOD BARK MULCH (COLOR: BROWN).
4. ALL DISTURBED SOIL AREA ADJACENT TO THE SITE IMPROVEMENTS SHALL BE STABILIZED WITH SEED.
5. ALL PLANT MATERIAL SHALL CONFORM TO GUIDELINES AS SET FORTH IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERIES STANDARD FOR NURSERY STOCK.
6. NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE MADE WITHOUT WRITTEN CONSENT FROM THE DESIGNATED TOWN OF CARMEL, NYS REPRESENTATIVE.
7. ALL PLANTINGS ARE TO BE IN ACCORDANCE WITH SECTION 142 OF THE TOWN OF CARMEL CODE.

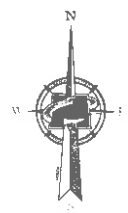
**SITE PLANTING SCHEDULE**

REV	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CAL	SPREAD	ROOT	REMARKS
<b>EVERGREEN TREES</b>								
10	9	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	5'-6'			P.B.B.	STRAIGHT LEADENY TYPE SPECIES PLANT
10	4	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8'-10'			P.B.B.	STRAIGHT LEADENY TYPE SPECIES PLANT
PA	1	PRUNUS AFRICA	NORWAY PRUNEL	8'-10'			P.B.B.	STRAIGHT LEADENY TYPE SPECIES PLANT
PS	1	PRUNUS AFRICA	EASTERN WHITE PRUNE	8'-10'			P.B.B.	STRAIGHT LEADENY TYPE SPECIES PLANT

**LANDSCAPE LEGEND**



TOWN OF CARMEL PLANNING BOARD APPROVAL



**MASER**  
CONSULTING ENGINEERS  
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SUITE 200  
CARMEL, NY 12024  
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5	01/15/2024	REVISED PER PERMIT	DAF	
6	01/15/2024	REVISED PER PERMIT	DAF	
7	01/15/2024	REVISED PER PERMIT	DAF	
8	01/15/2024	REVISED PER PERMIT	DAF	
9	01/15/2024	REVISED PER PERMIT	DAF	
10	01/15/2024	REVISED PER PERMIT	DAF	

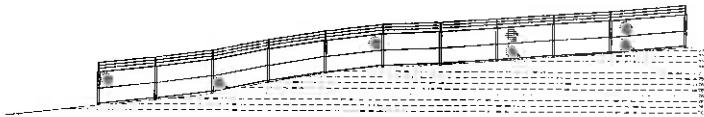
**DANIEL A. FARNAN**  
NEW YORK LICENSED PROFESSIONAL ENGINEER - LICENSE NUMBER: 00000000000000000000

**SITE PLAN OF PRESSURE REGULATOR STATION FOR CENTRAL HUDSON**  
BLOCK 53.017  
LOT 1  
SECTION 18  
TOWN OF CARMEL  
PUTNAM COUNTY  
STATE OF NEW YORK

**ALBANY OFFICE**  
1000 ROUTE 9W  
SUITE 200  
CARMEL, NY 12024  
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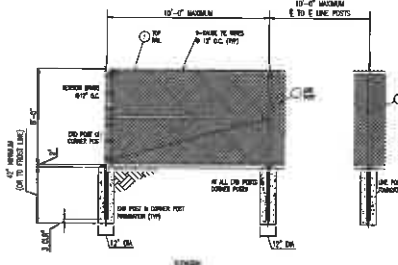
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8	01/15/2024	REVISED PER PERMIT	DAF	
9	01/15/2024	REVISED PER PERMIT	DAF	
10	01/15/2024	REVISED PER PERMIT	DAF	

**LANDSCAPE PLAN**  
2 of 3



**EAST ELEVATION VIEW  
PROPOSED FENCING**

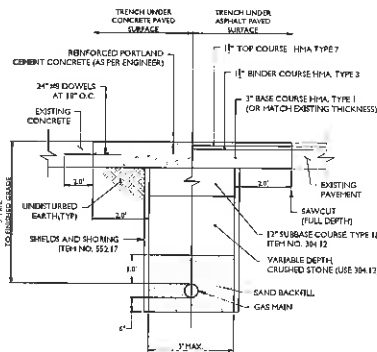
1" = 10'



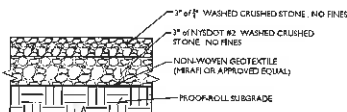
**FENCING NOTES:**

- CHAIN LINK FENCING FABRIC TO BE VINYL COATED, COLOR, BLACK
- FENCING TO BE 8'-0" TALL

**8' HIGH FENCING DETAIL  
NTS**

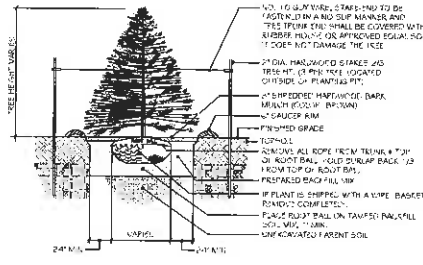


**TRENCH DETAIL - IN PAVEMENT  
NTS**



**NOTES:**  
ONLY THE PROPOSED SUBGRADE FOR THE GRAVEL AREA AND THE ACCESS DRIVE SHALL BE PROOF-ROLLED

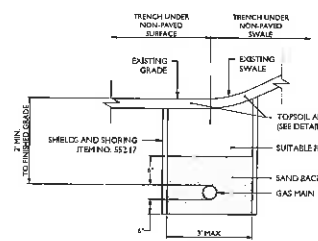
**GRAVEL SURFACE DETAIL  
NTS**



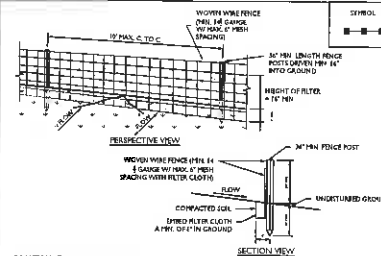
**EVERGREEN TREE PLANTING DETAIL  
NOT TO SCALE**

**PLANT DETAIL NOTES**

- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT. MULCH SHALL NOT TOUCH THE TREE TRUNK.
- PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY
- WIRE BASKETS AND NON-JUTE BURLAP MUST BE ENTIRELY REMOVED FROM THE ROOT BALL. JUTE BURLAP MUST BE REMOVED FROM THE TOP 1/3 OF THE ROOT BALL
- DEPTH OF PLANT PIT SHALL BE INCREASED BY 12" MINIMUM FOR SOIL. CONDITIONS OCCUR, WITH THE ADDITION OF LOOSE AGGREGATE
- CONTRACTOR SHALL PARTIALLY FILL WITH WATER A REPRESENTATIVE NUMBER OF PITS IN EACH AREA OF THE PROJECT PRIOR TO PLANTING TO DETERMINE IF THERE IS ADEQUATE INFILTRATION. IF ANY EXCESSIVE RUNOFF OCCURS, MEASURES MUST BE TAKEN TO ASSURE PROPER DRAINAGE BEFORE PLANTING
- PLANTINGS SUBJECT TO GUARANTEE CLAUSES WITHIN CONTRACT FOR WORK WITH CONTRACTOR AND THEIR SUBCONTRACTORS. AT MINIMUM PLANTINGS SHALL BE GUARANTEED FOR ONE (1) FULL GROWING YEAR FROM THE TIME OF FINAL ACCEPTANCE BY CENTRAL HUDSON
- BULK MIXTURE TO BE SPECIFIED BASED UPON SOIL TEST AND CULTURAL REQUIREMENTS OF PLANT
- PRUNE DAMAGED AND COLLECTING BRANCHES MAINTAINING NORMAL TREE SHAPE. NEVER CUT CENTRAL TRUNK OR LEADERS



**TRENCH DETAIL - NON-PAVED AREAS  
NTS**



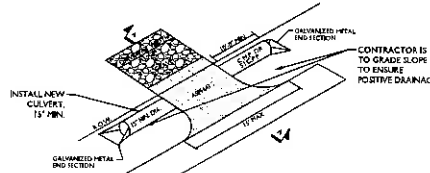
**CONSTRUCTION SPECIFICATIONS**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER 1" OR 1 1/2" DIA. HARDWOOD
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND TIED. FILTER CLOTH SHALL BE EITHER HERRING TIE, STABILIZATION, OR APPROVED EQUIVALENT
- PREFABRICATED UNITS SHALL BE GEOTEXTILE, EMBROIDERED, OR APPROVED EQUIVALENT
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE

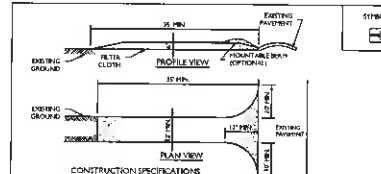
**SILT FENCE  
SCALE NTS**

**GENERAL SEEDING NOTES**

- TEMPORARY SEEDING SHALL CONSIST OF PERENNIAL MIX GRASS APPLIED AT A RATE OF 1.0 LBS. PER 1000 SQ. FT. OR SPRING GRASS APPLIED AT A RATE OF 2.0 LBS. PER 1000 SQ. FT. TEMPORARY SEEDINGS SHALL BE MULCHED AND MAINTAINED UNTIL ESTABLISHED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDINGS
- PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL - OPTIMUM SEEDING DATES ARE BETWEEN APRIL 1 AND MAY 31, AND AUGUST 15 AND OCTOBER 15  
MIXTURE - HARD FESCUE 120 LBS/ACRE  
PERENNIAL RYE GRASS 30 LBS/ACRE  
KENTUCKY BLUE GRASS (BLENDED) 40 LBS/ACRE  
MIXTURE - TALL FESCUE 160 LBS/ACRE  
PERENNIAL RYE GRASS (BLENDED) 20 LBS/ACRE  
KENTUCKY BLUE GRASS (BLENDED) 20 LBS/ACRE
- PERMANENT SEEDING TO BE APPLIED BY BROADCASTING OR DRILLING INTO THE SOILS AT A RATE OF 1500 PER ACRE. SLOPED AREA TO BE COVERED WITH MULCH AS INDICATED IN NOTE 6
- FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE IN COMPLIANCE WITH THE LATEST NYSDOT REGULATIONS. A SOIL TEST PRIOR TO FERTILIZER APPLICATION IS RECOMMENDED
- IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6
- MULCH TO COVER OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD AND PIER. MULCH BUNDLES OR ALL APPROVED EQUIVALENT MULCH WILL BE SPREAD AT RATE OF 10 TO 11 LBS. PER 100 SQ. FT. AND ANCHORED WITH A WOOD AND PIER. MULCH OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL SEEDINGS. HYDROMULCH SHALL ONLY BE USED DURING OPTIMUM GROWING SEASONS
- WORK, LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE DONE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE BEDDED IS WITH THE SEEDING WHENEVER FEASIBLE
- REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLOTH, LUMPS, OR OTHER UNSUITABLE MATERIAL
- IF SPOT SEEDING DATE BEFORE SEEDING IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FINISHED AS ABOVE



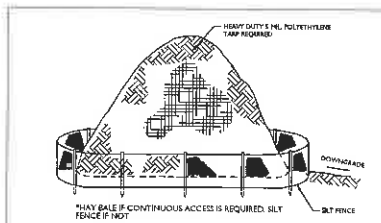
**TYPICAL DRIVEWAY WITH CULVERT DETAIL  
SCALE NTS**



**CONSTRUCTION SPECIFICATIONS**

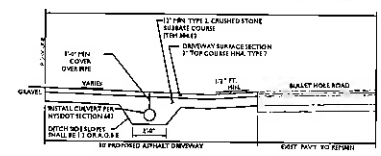
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT
- LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY)
- THICKNESS - NOT LESS THAN SIX (6) INCHES
- WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE
- FILTER CLOTH - WILL BE PLACED UNDER THE ENTIRE AREA PRIOR TO PLACING OF STONE
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PAVED ACROSS THE ENTRANCE. IF PAVING IS IMPRACTICAL, A MOUNTAIN BERM WITH 5:1 SLOPES WILL BE PERMITTED
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. ALL SEDIMENT SPILLED, DISPOSED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY
- WHEN MAINTENANCE IS REQUIRED IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN

**STABILIZED CONSTRUCTION ENTRANCE  
SCALE NTS**

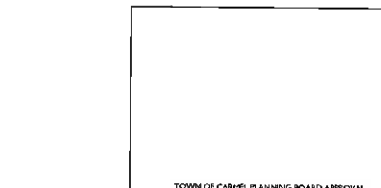


**SOIL STOCKPILE DETAIL  
SCALE NTS**

- AREA CHOSEN FOR STOCKPILING SHALL BE DRY AND STABLE
- MAXIMUM SLOPE OF STOCKPILES SHALL BE 1:1
- UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING AND STABILIZED BED AND MULCH OR LIME HIGH HAYBALES SHALL NOT BE USED IN LACK OF SILT FENCE
- SEE NYSDOT SPECIFICATIONS FOR INSTALLATION OF SILT FENCE
- SIZE OF STOCKPILE SHALL NOT EXCEED THE LIMITATIONS OF DRAINAGE AREA PER SILT FENCE
- INSTALL SILT FENCE ANCHOR HAYBALES A MINIMUM OF 3'-0" FROM THE TOE OF THE STOCKPILE



**DRIVEWAY SECTION A-A  
SCALE NTS**



TOWN OF CARMEL PLANNING BOARD APPROVAL

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NO.	DATE	DESCRIPTION
1	01/15/2011	Initial Design
2	02/15/2011	Revised Design
3	03/15/2011	Final Design
4	04/15/2011	Construction Details
5	05/15/2011	Final Review

**DANIEL A. FARNAN**  
Professional Engineer  
No. 12345  
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www.centralhudson.com

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[illegible]

1. PROJECT SHALL FOLLOW CENTRAL HUDSON GAS AND ELECTRIC CORP. GAS CONSTRUCTION AND MATERIAL STANDARDS UNLESS OTHERWISE NOTED.
2. THESE PLANS REFERENCE ITEM NUMBERS FROM: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED MAY 1, 2008, WITH CURRENT ADDITIONS AND MODIFICATIONS.
3. ALL SHOP DRAWINGS SUBMITTED FOR THIS PROJECT SHALL BE IN US CUSTOMARY UNITS.
4. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THOSE ITEMS.
5. THE CONTRACTOR IS ADVISED THAT ADDITIONAL "NOTES" WILL BE FOUND ON SUBMITTAL SHEETS OF THE CONTRACT PLANS AND SUCH "NOTES", WHILE PERTAINING TO THESE SPECIFIC SHEETS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
6. NO ADDITIONAL PAYMENT WILL BE MADE FOR WORK CALLED FOR BY NOTES ON THE PLAN OR IN THE SPECIFICATIONS FOR WHICH NO ITEM NUMBER IS INDICATED. THE COST OF SUCH WORK SHALL BE INCLUDED IN THE PRICES FOR VARIOUS ITEMS OF THIS CONTRACT.
7. CARE SHALL BE TAKEN TO RETAIN NATURAL GROWTH AND PREVENT DAMAGE TO TREES WITHIN AND OUTSIDE THE LIMITS OF CONSTRUCTION, AND NOT SCHEDULED. FOR REMOVAL, ANY DAMAGE CAUSED TO THIS NATURAL GROWTH SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR AS DIRECTED BY CENTRAL HUDSON.
8. THE CONTRACTOR IS TO VISIT THE SITE BEFORE BIDDING, TO FAMILIARIZE THEMSELVES WITH THE FIELD CONDITIONS AND TO JUDGE FOR THEMSELVES THE EXTENT AND NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO EXTRA COMPENSATION WILL BE ALLOWED BECAUSE OF THE CONTRACTORS FAILURE TO INCLUDE IN THEIR BID ALL ITEMS AND MATERIALS WHICH THEY ARE REQUIRED TO FURNISH IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
9. ALL CONCRETE USED ON THIS PROJECT SHALL BE DESIGNED WITH A COMPRESSIVE STRENGTH (f<sub>c</sub>), AT 28 DAYS, OF 3000 POUNDS PER SQUARE INCH (psi).

I. THE END OF EACH "STUB" OR "SPUR LINE" SHALL BE LOCATED IN THE SHOULDER OF THE ROADWAY AS SHOWN ON THE DRAWINGS. THE SPUR SHALL CONSIST OF A 10" X 10" X 4" STEEL LINE-IN TEE, A 4 INCH PIPE-TYPE TRANSITION TO PLASTIC, A MINIMUM OF 5 FEET OF 4" PLASTIC PIPE, A 4 INCH FULL PORT PLASTIC BALL VALVE, A MINIMUM OF 5' FEET OF 4" PLASTIC PIPE, A PURGE POINT ASSEMBLY, AND A 4" PLASTIC END CAP. THESE SPUR LINES SHALL BE PRESSURE TESTED ALONG WITH ALL OTHER PIPING. PURGING SHALL BE COMPLETED IN ACCORDANCE WITH CENTRAL HUDSON'S OPERATING AND MAINTENANCE PROCEDURES #120.

1. INSTALL ALL WORK ZONE TRAFFIC CONTROL (AS REQUIRED PER NYSDDOT & MUTCD STANDARDS), THESE PLANS AND PERMIT RESTRICTIONS.
2. INSTALL PROPOSED GAS FACILITIES AND INSTALL SERVICES TO THE NEW GAS MAIN (AS REQUIRED).
3. BACKFILL AND RE-PAVE TRENCH AS REQUIRED (SEE MISCELLANEOUS DETAILS AS PART OF THIS SET).

I. HIGH VOLTAGE AND/OR OVERHEAD ELECTRIC UTILITY WIRES MAY BE PRESENT WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS WHILE WORKING IN OR AROUND THESE UTILITIES.

1. FOUR SEPARATE QUALITY LEVELS OF SUBSURFACE UTILITY FACILITY INFORMATION ARE GENERALLY RECOGNIZED AND ARE AS FOLLOWS:

**QUALITY LEVEL C (QLC):** QUALITY LEVEL C IS THE THIRD HIGHEST DEGREE OF ACCURACY. THE INFORMATION SHOWN ON THE PLANS HAS BEEN OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGEMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION. (SHOWN AS QLC)

1. THE CONTRACTOR SHALL NOT EXPOSE ANY SUBGRADE THAT CANNOT BE BACKFILLED AND COMPACTED WITH SUBBASE MATERIAL BY THE END OF EACH WORK DAY OR AS APPROVED BY THE ENGINEER. STEEL PLATING WITH PINS AND RAMPED EDGES IS ALSO ACCEPTABLE FOR OVERNIGHT AND TEMPORARY PURPOSES.
2. COMPACTED SUBBASE MATERIAL SHALL NOT BE EXPOSED FOR MORE THAN SEVEN CALENDAR DAYS OR AS APPROVED BY THE ENGINEER.

1. ALL AREAS DISTURBED DURING TRENCHING AND WORK OPERATIONS MUST BE STABILIZED WITHIN 14 DAYS.
2. ALL TRENCHING ACTIVITIES SHOULD BE BACKFILLED (OR STEEL PLATED WITH PINS AND EDGE RAMPING) AND TEMPORARILY STABILIZED AT THE END OF EACH WORK DAY.
3. ALL TRENCHING IN PAVEMENT SHOULD BE SAWCUT PRIOR TO TRENCHING. PAVEMENT RESTORATIONS MAY REQUIRE ADDITIONAL CUTBACKS (ALSO AS DETAILED IN THIS SET) AFTER TRENCHING OPERATIONS HAVE BEEN COMPLETED.
4. ALL PAVED AREAS MUST BE RESTORED WITHIN A MINIMUM OF 4" TEMPORARY PAVING AT THE CLOSE OF EACH DAY'S WORK.
5. PERMANENT PAVING MUST BE COMPLETED AT DAILY TEMPERATURES COMPLIANT WITH THE NYSDOT STANDARD SPECIFICATIONS.

1. THE WETLAND FLAGGING AND LOCATIONS WERE DELINEATED BY MASER CONSULTING ON NOVEMBER 18 & 22, 2016 AND DECEMBER 2, 2016.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY FINDING OF SPILLS, LEAKS OF PETROLEUM PRODUCTS, CONTAMINATED SOILS, BURIED DRUMS OF UNKNOWN SUBSTANCES, OR ANY OTHER POTENTIALLY HAZARDOUS MATERIALS TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) WITHIN TWO (2) HOURS OF THE DISCOVERY. NOTIFICATION MUST BE MADE BY CALLING THE NYSDEC SPILLS HOTLINE 1 (800) 457-7362.

3. THE CONTRACTOR IS REQUIRED TO KEEP SPILL KITS AT THE FOLLOWING LOCATIONS DURING THE ENTIRE DURATION OF CONSTRUCTION:

3.2. ONE (1) KIT SHALL BE KEPT AT THE LOCATION OF WORK VEHICLES, EXCAVATORS, TRUCKS OR OTHER PIECES OF CONSTRUCTION EQUIPMENT WHICH HAVE THE POTENTIAL TO SPILL/DISCHARGE POTENTIALLY HAZARDOUS MATERIALS.

3.3. ONE (1) KIT KEPT AT THE LOCATION OF EACH HORIZONTAL DIRECTIONAL DRILLING OPERATION.

4. IN THE EVENT A KIT IS USED OR DAMAGED, IT SHALL BE REPLACED IMMEDIATELY BEFORE COMMENCING WITH CONSTRUCTION.

1. THE CONTRACTOR WILL BE REQUIRED TO DEVELOP AND IMPLEMENT A NOISE CONTROL PLAN.
2. THE TOWN OF CARMEL TOWN CODE LIMITS CONSTRUCTION NOISE LEVELS TO: 70 dbA WITHIN 400 FEET OF A RESIDENTIAL BUILDING, MONDAY THROUGH FRIDAY, AND 65 dbA ON SATURDAYS. THE CONTRACTOR SHALL COMPLY WITH THIS LIMITS FOR THE DURATION OF CONSTRUCTION.
3. POTENTIAL NOISE IMPACTS WILL BE MINIMIZED BY PROHIBITING TRUCK DRIVERS FROM USING ENGINE BRAKES (EXCEPT IN EMERGENCY SITUATIONS) OR FROM IDLING THEIR VEHICLES FOR MORE THAN 15 MINUTES.
4. CONSTRUCTION EQUIPMENT WILL USE A SYSTEM OF MUFFLERS TO LIMIT OPERATIONAL NOISE.
5. CONTRACTOR SHALL USE HIGH FREQUENCY/VARIABLE MOMENT VIBRATORY HAMMER, AND LIMIT HAMMERING OPERATIONS TO TIMES OF DAY WITH MINIMAL IMPACT TO RESIDENTIAL NEIGHBORHOODS: MONDAY - FRIDAY, 9 AM TO 4PM.
6. CONSTRUCTION TRAFFIC WILL GENERALLY BE LIMITED TO THE HOURS OF 8:00 AM TO 6:00 PM, MONDAY THROUGH FRIDAY. LIGHT CONSTRUCTION WORK THAT GENERATES LOW NOISE IMPACTS TO RESIDENTIAL NEIGHBORHOODS MAY TAKE PLACE 8:00 AM TO 4:00 PM, ON SATURDAYS. NO CONSTRUCTION, EXCEPT FOR INSTANCES OF EMERGENCY WORK, SHALL TAKE PLACE ON SUNDAYS.

THE AREA BENEATH THE DRIP LINE OF ALL TREES WITH A TRUNK DIAMETER OF 3 INCHES OR GREATER LOCATED OUTSIDE OF THE PROJECT CLEARING LIMITS OR IN PROXIMITY TO STAGING AND STOCKPILE AREAS SHALL NOT BE DISTURBED. DISTURBANCE INCLUDES REMOVING TREES, STOCKPILING MATERIAL, STORING EQUIPMENT, OR DRIVING AND PARKING VEHICLES BENEATH DRIP LINES OF TREES. ADDITIONAL TREES REQUIRING PROTECTION MAY BE DESIGNATED BY THE ENGINEER-IN-CHARGE (EIC). THE CONTRACTOR SHALL SUBMIT A PLAN TO THE EIC FOR APPROVAL SHOWING THE PROPOSED STAGING, STORAGE AND STOCKPILE AREAS FOR EACH SITE PRIOR TO PLACEMENT OF ANY EQUIPMENT OR MATERIALS AT THE SUBJECT AREA.

IN ORDER TO PREVENT ANY DIRECT TAKINGS OF INDIANA BAT (*MYOTIS SODALIS*), A FEDERAL AND STATE LISTED ENDANGERED SPECIES AND NORTHERN LONG-EARED BAT (*MYOTIS SEPTENTRIONALIS*), A FEDERAL AND STATE LISTED THREATENED SPECIES, THE CONTRACTOR'S ATTENTION IS HEREBY DIRECTED TO THE FACT THAT TREE CUTTING SHALL ONLY BE PERFORMED FROM OCTOBER 31 THROUGH MARCH 31, TIME OF YEAR TREE CUTTING RESTRICTIONS APPLY TO TREES THAT ARE 3 INCHES OR GREATER DIAMETER AT BREAST HEIGHT (DBH).

BOG TURTLE (CLEMMY'S MUEHLENBERGII), A FEDERALLY THREATENED AND STATE ENDANGERED SPECIES, IS KNOWN TO HAVE HISTORICALLY EXISTED NEAR THIS WORK LOCATION. THE FACT SHEET DESCRIBING THIS SPECIES AND ITS HABITAT WILL BE DISTRIBUTED AT THE PRE-CONSTRUCTION MEET AND SHALL BE DISTRIBUTED TO ALL EMPLOYEES AND SUBCONTRACTORS WORKING ON THE PROJECT. THE FACT SHEET CAN ALSO BE FOUND AT: <http://www.acris.nmhp.org/guide.php?id=7507>. IF THIS SPECIES IS ENCOUNTERED, NOTIFY THE ENGINEER-IN-CHARGE IMMEDIATELY.

UNDER THE MIGRATORY BIRD TREATY ACT (MBTA), IT IS UNLAWFUL BY ANY MEANS OR MANNER TO INTENTIONALLY OR UNINTENTIONALLY TAKE, CAPTURE, OR KILL ANY MIGRATORY BIRD UNLESS A PERMIT IS FIRST SECURED. VIOLATIONS OF MBTA REGULATIONS ARE SUBJECT TO PENALTIES OF UP TO \$16,000 AND SIX MONTHS IMPRISONMENT.

PROTECTED MIGRATORY BIRDS INCLUDE ALL WATERFOWL, HERONS, HAWKS, OWLS, EAGLES AND SONGBIRDS, INCLUDING SWALLOWS, ROBINS, AND EASTERN PHOEBES. THEIR FEATHERS, NESTS, AND EGGS ARE ALSO PROTECTED UNDER THE MBTA.

EXEMPT FROM THE MBTA ARE ROCK DOVES (DOMESTIC PIGEONS), HOUSE SPARROWS (ENGLISH SPARROWS), EUROPEAN STARLINGS, AND MONK PARAKEETS. NON-NATIVE HUMAN-INTRODUCED BIRD SPECIES ARE NOT PROTECTED BY THE MBTA. ALTHOUGH THESE SPECIES ARE NOT PROTECTED UNDER THE MBTA, THEY SHOULD STILL BE TREATED AS HUMANELY AS POSSIBLE. IF ANY BIRD NESTS ARE ENCOUNTERED PRIOR TO OR DURING WORK CONTACT THE ENGINEER-IN-CHARGE (EIC) IMMEDIATELY.

AREAS SCHEDULED FOR WORK FROM APRIL 15 TO AUGUST 15 (THE PERIOD IN WHICH NESTS ARE TYPICALLY FOUND WITH EGGS OR UNFLEDGED CHICKS) SHALL BE INSPECTED FOR BIRD NESTING ACTIVITY PRIOR TO COMMENCING ANY WORK ACTIVITY. IF THE NEST(S) IS DETERMINED TO BE OCCUPIED, AVOID DISTURBING, DAMAGING OR REMOVING THE NEST UNTIL THE YOUNG ARE FLEDGED (LEAVE THE NEST AT NO TIME SHOULD THE NESTS OF HAWKS, FALCONS, OR EAGLES BE DESTROYED, AS THESE SPECIES RETURN TO THE SAME NEST SITE YEAR AFTER YEAR AND REUSE THE SAME NEST.

AFTER FLEDGING OCCURS (OF SPECIES OTHER THAN HAWKS, FALCONS OR EAGLES), AND ALL NESTING ACTIVITY IS BELIEVED TO HAVE CEASED (TYPICALLY INDICATED BY ADULT BIRDS MOVING TO AND FROM THE NEST, SOUNDING OF YOUNG IN THE NEST, OR BIRDS PERSISTING IN THE VICINITY OF THE NEST), THEN THE NEST(S) CAN BE PRESUMED TO BE UNOCCUPIED AND CAN BE REMOVED SO THAT WORK MAY PROCEED. UNOCCUPIED NEST(S) SHOULD BE REMOVED AS QUICKLY AS POSSIBLE TO PREVENT BIRDS FROM BEGINNING A SECOND NEST BROOD AT THE SAME LOCATION.

FROM AUGUST 16 TO APRIL 14 NESTS CAN BE PRESUMED TO BE UNOCCUPIED AND CAN BE REMOVED AFTER CONFIRMING THAT THE NEST IS INDEED INACTIVE.

IF THERE ARE ANY QUESTIONS REGARDING HOW TO PROCEED WITH NESTING MIGRATORY BIRDS, IMMEDIATELY CONTACT THE EIC. NO NESTS OF PROTECTED MIGRATORY BIRDS SHALL BE REMOVED OR DISTURBED IN ANY WAY WITHOUT PERMISSION FROM THE EIC.


I. THIS PROJECT REQUIRES THE FOLLOWING PERMITS:

- TOWN PLANNING BOARD APPROVAL & SEQRA DETERMINATION
- TOWN DRIVEWAY PERMIT
- TOWN WETLAND DISTURBANCE PERMIT
- TOWN ROAD OPENING PERMIT (50)
- PUTNAM COUNTY ROAD OPENING PERMIT
- NYSDOT UTILITY WORK PERMIT
- NYSDOT DETOUR PERMIT
- PUTNAM COUNTY DETOUR PERMIT
- NYSDOC #01 WATER QUALITY CERTIFICATION
- NYSDOC #01 WETLAND BUFFER DISTURBANCE PERMIT

[illegible][illegible]

**BRETT D. REYNOLDS**  
NEW YORK LICENSED PROFESSIONAL  
DRINKING WATER EXAMINER

PROJECT ROUTE DESIGN  
PLANS  
FOR  
*People, Power, Progress.*  
**Central Hudson**  
A JEROME COMPANY  
S - M LINE GAS  
REINFORCEMENT PROJECT  
TOWN OF CARMEL  
PUTNAM COUNTY, NY



**ALBANY OFFICE**  
18 Computer Drive East  
Suite 203  
Albany, NY 12205  
Phone: 518/459-3252  
Fax: 518/459-3300

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	04/10/17	DAF	BOR
PROJECT NUMBER	DRAWING NAME		
15000624A	C-NOTE		

SHEET NUMBER  
2 of 34

Table of Construction Lengths and Land Disturbance			
Length of Piping (ft.)	Length of Open Trench (ft.)	Length of Directional Boring (ft.)	Trenching Width (MAX) (ft.)
20,436.00	20,036.00	400.00	3.00
Land Disturbances:			
Trenching	Reg. Station	Spoils Area*	Staging Area*
(Acres)	(Acres)	(Acres)	(Acres)
1.380	0.103	0.000	0.000
Total Area of Land Disturbance:		1.483	Acres

\*Note: Staging Area and Spoils Area are greater than 0.25 miles from site.

NO.	DRAWING SHEET #	PIPE STATION	PIPE/CULVERT		OWNED BY (ASSUMED)	METHOD OF CROSSING	MIN. SEPARATION DISTANCE (FT)
			SIZE (INCHES)	MATERIAL			
1	5	4+10	12	HDPE	TOWN	OPEN TRENCH	1.00
2	5	5+75	12	HDPE	TOWN	OPEN TRENCH	1.00
3	6	16+60	UNKN.	UNKN.	TOWN	OPEN TRENCH	1.00
4	7	28+90	UNKN.	UNKN.	TOWN	HDD	5.00
5	7	34+60	UNKN.	UNKN.	TOWN	OPEN TRENCH	1.00
6	9	54+00	36 (2)	CMF	PUTNAM CO.	HDD	5.00
7	11	77+00	15	CPHD/HDPE	PUTNAM CO.	OPEN TRENCH	5.00
8	13	89+75	18	UNKN.	TOWN	OPEN TRENCH	1.00
9	16	117+00	UNKN.	UNKN.	TOWN	OPEN TRENCH	1.00
10	16	126+60	12	HDPE	TOWN	OPEN TRENCH	1.00
11	18	143+75	12	CMF	TOWN	OPEN TRENCH	1.00
12	18	144+75	12	HDPE	TOWN	OPEN TRENCH	1.00
13	19	158+25	12	HDPE	TOWN	OPEN TRENCH	1.00
14	19	162+40	10	CMF	TOWN	OPEN TRENCH	1.00
15	20	167+50	12	HDPE	TOWN	OPEN TRENCH	1.00
16	20	172+50	12	HDPE	TOWN	OPEN TRENCH	1.00
17	20	174+90	15	CMF	TOWN	OPEN TRENCH	1.00
18	22	194+00	24	UNKN.	TOWN	OPEN TRENCH	1.00

NOTE: ONLY PARTIAL UNDERGROUND STORM SEWER MAPPING IS AVAILABLE. ADDITIONAL CROSSINGS MAY BE ENCOUNTERED DURING CONSTRUCTION.

DRAWING SHEET #	STATION TO STATION		LOCATED	LENGTH (FT)		ROAD	REASON FOR UNDER PAVEMENT
	START	END		TURF	PAVEMENT		
4	0+00	0+25	ROW TURF	25		BULLET HOLE ROAD	
4	0+25	0+50	PAVEMENT		25	BULLET HOLE ROAD	CROSSING
4 TO 5	0+50	5+00	ROW TURF	450		BULLET HOLE ROAD	
5	5+00	8+00	PAVEMENT		300	BULLET HOLE ROAD	WETLAND AVOIDANCE
5 TO 6	8+00	28+00	ROW TURF	2000		BULLET HOLE ROAD	
7	28+00	28+50	PAVEMENT		50	BULLET HOLE ROAD	CROSSING
7	28+50	32+50	ROW TURF	400		BULLET HOLE ROAD	
	32+50	42+30	PAVEMENT		980	BULLET HOLE ROAD	NARROW ROW & PROPERTY AT CENTERLINE
7 TO 8	42+30	51+50	ROW TURF	920		HILL STREET (CR 32)	
9	51+50	54+75	PAVEMENT		325	HILL STREET (CR 32)	WETLAND AVOIDANCE
9 TO 10	54+75	58+75	ROW TURF	400		HILL STREET (CR 32)	
10	58+75	69+00	PAVEMENT		1025	HILL STREET (CR 32)	NARROW ROW & WETLAND AVOIDANCE
11	69+00	73+75	ROW TURF	475		HILL STREET (CR 32)	
11 TO 12	73+75	80+50	PAVEMENT		675	LONG POND RD (CR 32)	WETLAND AVOIDANCE
12	80+50	83+75	ROW TURF	275		LONG POND RD (CR 32)	
12	83+75	87+50	PAVEMENT		425	LONG POND RD (CR 32)	WETLAND AVOIDANCE
12 TO 14	87+50	99+50	ROW TURF	1200		LONG POND RD (CR 32)	
14	99+50	108+50	PAVEMENT		900	LONG POND RD (CR 32)	CROSSING
14 TO 15	108+50	113+00	ROW TURF	450		LONG POND RD (CR 32)	
15 TO 18	113+00	144+00	PAVEMENT		3100	WIXOM POND ROAD	NARROW ROW
18 TO 19	144+00	164+25	ROW TURF	2025		WIXOM POND ROAD	
19 TO 21	164+25	187+00	PAVEMENT		2275	WIXOM POND ROAD	NARROW ROW & WETLAND AVOIDANCE
21	187+00	190+00	ROW TURF	300		WIXOM POND ROAD	
21 TO 22	190+00	198+00	PAVEMENT		800	WIXOM POND ROAD	NARROW ROW
22 TO 23	198+00	203+50	ROW TURF	550		COONEY ROAD	
23	203+50	204+00	PAVEMENT		50	COONEY ROAD	CROSSING
23	204+00	204+36	ROW TURF	36		NTS ROUTE 6	
	TOTAL	204+36.00		9506.00	10930.00		

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2	09/06/17	DME	EDITS PER CHASE COMMENTS
3	09/11/17	DME	EDITS PER CHASE COMMENTS

**BRETT D. REYNOLDS**  
NEW YORK LICENSED PROFESSIONAL  
ENGINEER - LICENSE NUMBER 06879-01

**PROJECT ROUTE DESIGN  
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A POWER COMPANY  
**S - M LINE GAS  
REINFORCEMENT PROJECT**  
**TOWN OF CARMEL  
PUTNAM COUNTY, NY**

**ALBANY OFFICE**  
 10 Corporate Drive East  
 Suite 202  
 Albany, NY 12205  
 Phone: 518-459-3753  
 Fax: 518-459-1200

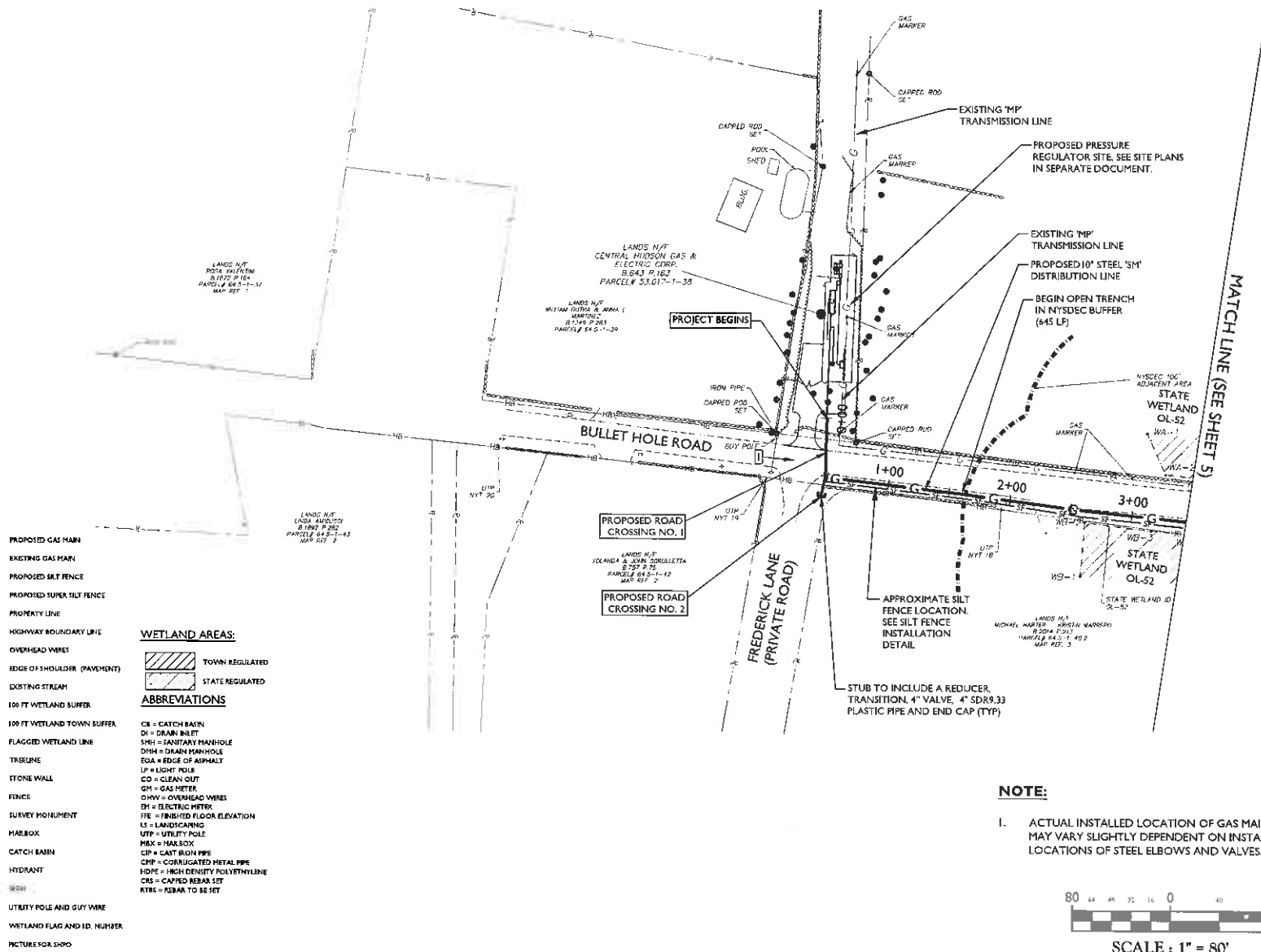
SCALE	DATE	DRAWN BY	CHECKED
AS SHOWN	04/26/17	DAF	BOB
PROJECT NUMBER	DRAWING NAME		
1500N244	C-NOTE		

SHEET TITLE

MISC. TABLES

SHEET NUMBER

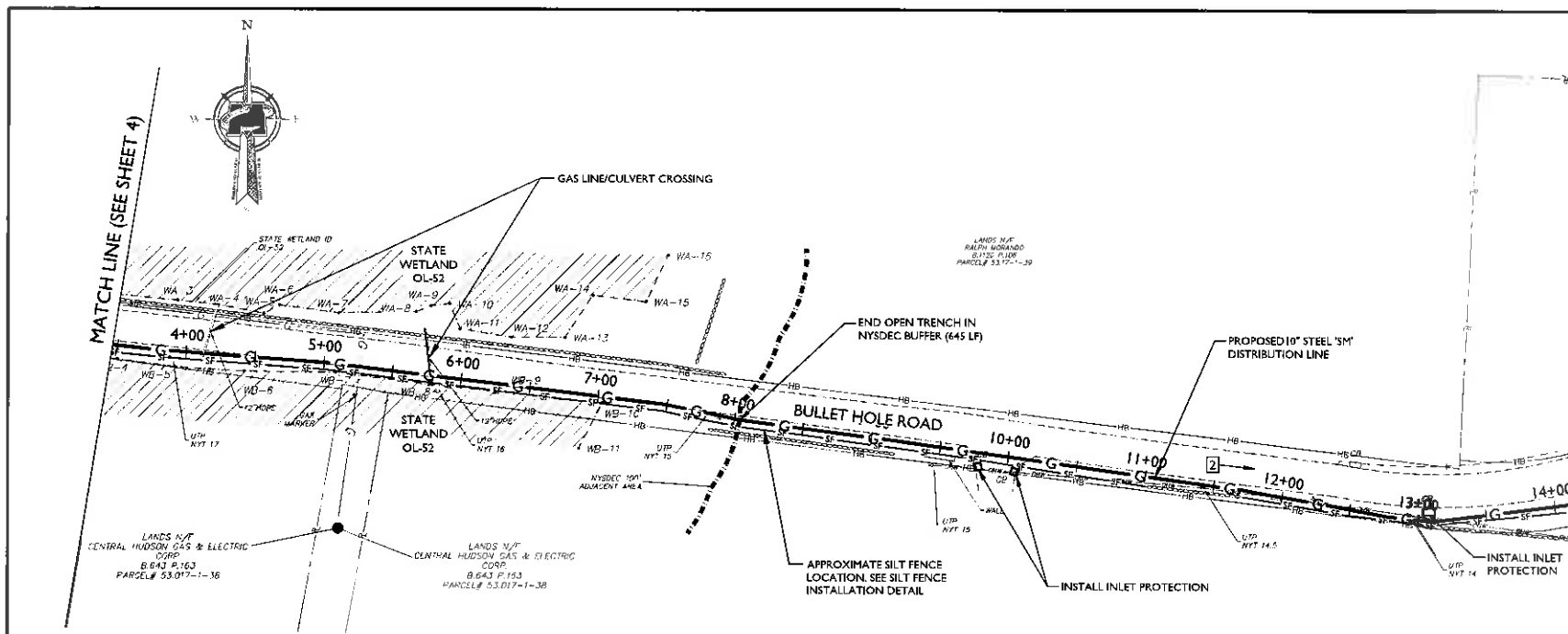
3 of 34



I. ACTUAL INSTALLED LOCATION OF GAS MAIN MAY VARY SLIGHTLY DEPENDENT ON INSTALLED LOCATIONS OF STEEL ELBOWS AND VALVES.

[illegible]





MATCH LINE (SEE SHEET 6)

**LEGEND:**

- G — G — PROPOSED GAS MAIN
- G — F — EXISTING GAS MAIN
- SF — SF — PROPOSED SALT FENCE
- SF — SF — PROPOSED SUPER SALT FENCE
- P — P — PROPERTY LINE
- H — H — HIGHWAY BOUNDARY LINE
- O — O — OVERHEAD WIRES
- E — E — EDGE OF SHOULDER (PAVEMENT)
- S — S — EXISTING STREAM
- B — B — 100 FT WETLAND BUFFER
- B — B — 100 FT WETLAND TOWN BUFFER
- F — F — FLAGGED WETLAND LINE
- T — T — TREELINE
- W — W — STONE WALL
- X — X — FENCE
- M — M — SURVEY MONUMENT
- H — H — HATCHBOX
- C — C — CATCH BASIN
- H — H — HYDRANT
- S — S — SIGN
- U — U — UTILITY POLE AND GUY WIRE
- W — 2 — WETLAND FLAG AND ID. NUMBER
- P — P — PICTURE FOR SHPO

**WETLAND AREAS:**

- TOWN REGULATED
- STATE REGULATED

**ABBREVIATIONS**

- CB = CATCH BASIN
- DI = DRAIN INLET
- SHA = SANITARY MANHOLE
- DMH = DRAIN MANHOLE
- EOA = EDGE OF ASPHALT
- UP = LIGHT POLE
- CO = CLEAN OUT
- GM = GAS METER
- OHW = OVERHEAD WIRES
- EM = ELECTRIC METER
- RFE = FINISHED FLOOR ELEVATION
- LS = LANDSCAPING
- UTP = UTILITY POLE
- HMBX = HATCHBOX
- CIP = CAST IRON PIPE
- CMP = CORRUGATED METAL PIPE
- HDPH = HIGH DENSITY POLYETHYLENE
- CRS = CAPPED REBAR SET
- NTS = REBAR TO RESET

**NOTE:**

1. ACTUAL INSTALLED LOCATION OF GAS MAIN MAY VARY SLIGHTLY DEPENDENT ON INSTALLED LOCATIONS OF STEEL ELBOWS AND VALVES.



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Port Jervis, NY	Port Jervis, NY
Port Jervis, NY	Port Jervis, NY
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2	08/08/17	EXT. PLS. CAGE COMMENTS	DAF

**BRETT D. REYNOLDS**  
NEW YORK LICENSED PROFESSIONAL  
ENGINEER - LICENSE NUMBER 18904

**PROJECT ROUTE DESIGN PLANS FOR**  
**Central Hudson**  
S - M LINE GAS REINFORCEMENT PROJECT  
TOWN OF CARMEL  
PUTNAM COUNTY, NY

**ALBANY OFFICE**  
10 Corporate Drive  
Albany, NY 12205  
Phone: 518-439-7322  
Fax: 518-439-7384

NAME	DATE	REVISION	DESCRIPTION
AS SHOWN	08/20/17	DAF	BCA
PROJECT TEAM			
DESIGNER			
DRAWN			
CHECKED			

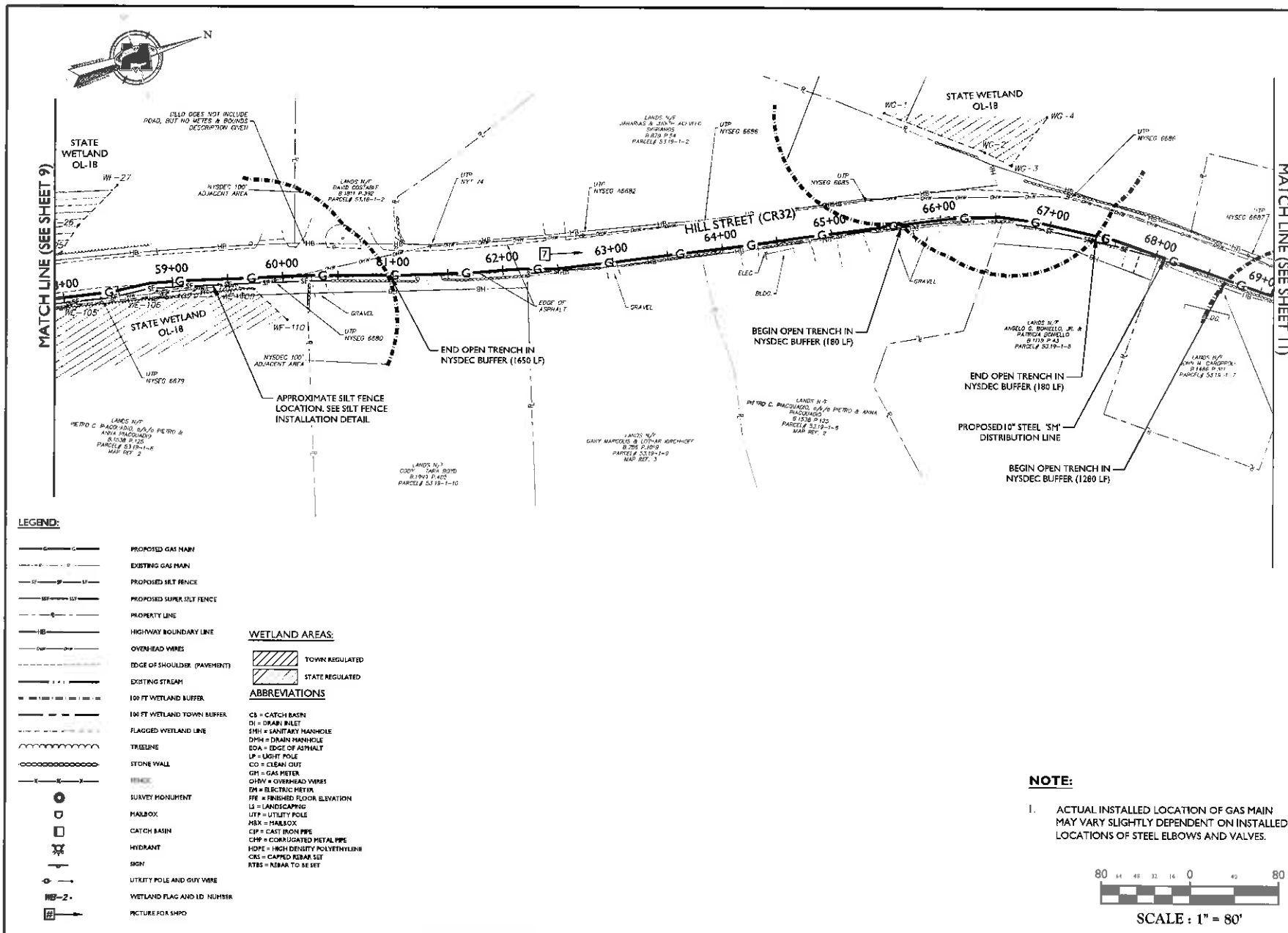
**GENERAL PLAN**  
(2 OF 20)  
SHEET NUMBER  
5 of 34











MATCH LINE (SEE SHEET 11)

# LEGEND:

- G — G — PROPOSED GAS MAIN
- E — E — EXISTING GAS MAIN
- S — S — PROPOSED SILT FENCE
- SS — SS — PROPOSED SUPER SILT FENCE
- P — P — PROPERTY LINE
- H — H — HIGHWAY BOUNDARY LINE
- O — O — OVERHEAD WIRE
- E — E — EDGE OF SHOULDER (PAVEMENT)
- S — S — EXISTING STREAM
- 100 — 100 — 100 FT WETLAND BUFFER
- 100 — 100 — 100 FT WETLAND TOWN BUFFER
- F — F — FLAGGED WETLAND LINE
- T — T — TREE LINE
- S — S — STONE WALL
- S — S — SURVEY MONUMENT
- M — M — MANHOLE
- C — C — CATCH BASIN
- H — H — HYDRANT
- S — S — SIGN
- U — U — UTILITY POLE AND GUY WIRE
- W — W — WETLAND FLAG AND ID NUMBER
- P — P — PICTURE FOR SHPO

## WETLAND AREAS:

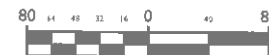
- T — T — TOWN REGULATED
- S — S — STATE REGULATED

## ABBREVIATIONS

- CS = CATCH BASIN
- DI = DRAIN INLET
- SH = SANITARY MANHOLE
- DPM = DRAIN MANHOLE
- EOA = EDGE OF ASPHALT
- UP = LIGHT POLE
- CO = CLEAN OUT
- GH = GAS METER
- OHV = OVERHEAD WIRE
- EW = ELECTRIC WIRE
- PFE = FINISHED FLOOR ELEVATION
- LS = LANDSCAPING
- UTP = UTILITY POLE
- MBX = MANHOLE
- CIP = CAST IRON PIPE
- CMP = CORRUGATED METAL PIPE
- HDP = HIGH DENSITY POLYETHYLENE
- CRS = CAPPED REBAR SET
- RTBS = REBAR TO BE SET

## NOTE:

1. ACTUAL INSTALLED LOCATION OF GAS MAIN MAY VARY SLIGHTLY DEPENDENT ON INSTALLED LOCATIONS OF STEEL ELBOWS AND VALVES.



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KEY	DATE	DESCRIPTION	DATE	DESCRIPTION
1	08/01/17	DATE PER CAGE PLANNING BOARD AND EDC COMMENTS		
2	09/01/17	DATE PER CAGE COMMENTS		

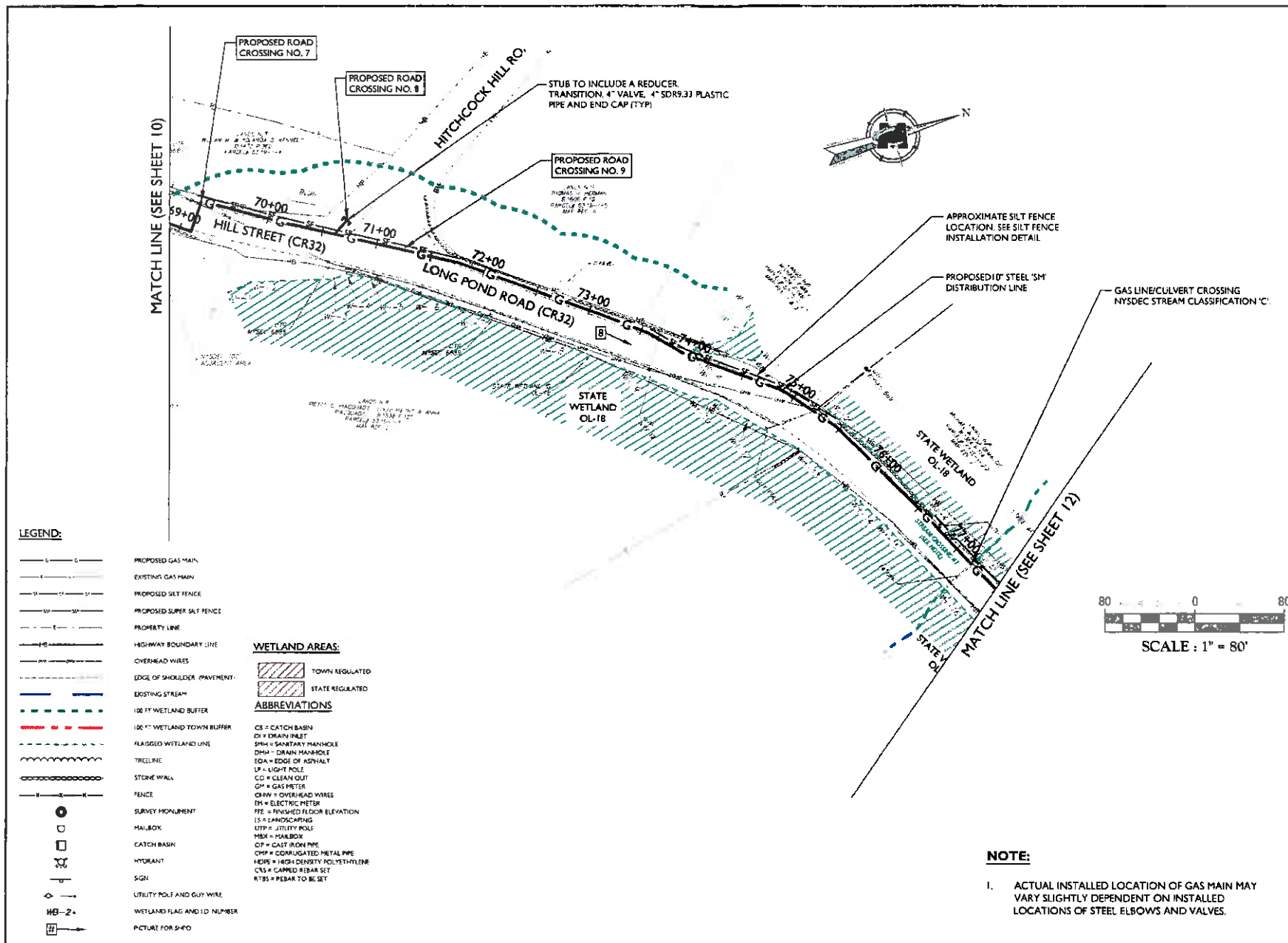
BRETT D. REYNOLDS  
NEW YORK LICENSED PROFESSIONAL  
ENGINEER - LICENSE NUMBER: 3496

PROJECT ROUTE DESIGN  
PLANS  
FOR  
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S - M LINE GAS  
REINFORCEMENT PROJECT  
TOWN OF CARMEL  
PUTNAM COUNTY, NY

ARANY OFFICE  
1500 Broadway  
New York, NY 10013  
Phone: 212-693-1234  
Fax: 212-693-1234

DATE: 08/01/17  
BY: BDR  
CHECKED BY: BDR  
PROJECT NUMBER: 150006241  
DRAWN BY: CLAYT  
SCALE: 1" = 80'  
SHEET TITLE: GENERAL PLAN  
(7 OF 20)  
SHEET NUMBER: 10 of 34





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DATE	BY	CHKD	APPD	REVISION
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08/20/17	DAF	DAF	DAF	2. REVISED DESIGN
08/20/17	DAF	DAF	DAF	3. REVISED DESIGN

**BRETT D. REYNOLDS**  
 TOWN ENGINEER  
 TOWN OF CARMEL  
 1100 N. 1ST ST.  
 CARMEL, NY 12016

**PROJECT ROUTE DESIGN PLANS**  
 FOR  
**Central Hudson**  
 S-M LINE GAS REINFORCEMENT PROJECT  
 TOWN OF CARMEL  
 PUTNAM COUNTY, NY

**ALBANY OFFICE**  
 1800 N. 1ST ST.  
 ALBANY, NY 12016  
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 Fax: 518-439-3334

DATE: 08/20/17  
 DRAWN BY: DAF  
 CHECKED BY: DAF  
 PROJECT NO: 1000000000  
 SHEET NO: 11 OF 34





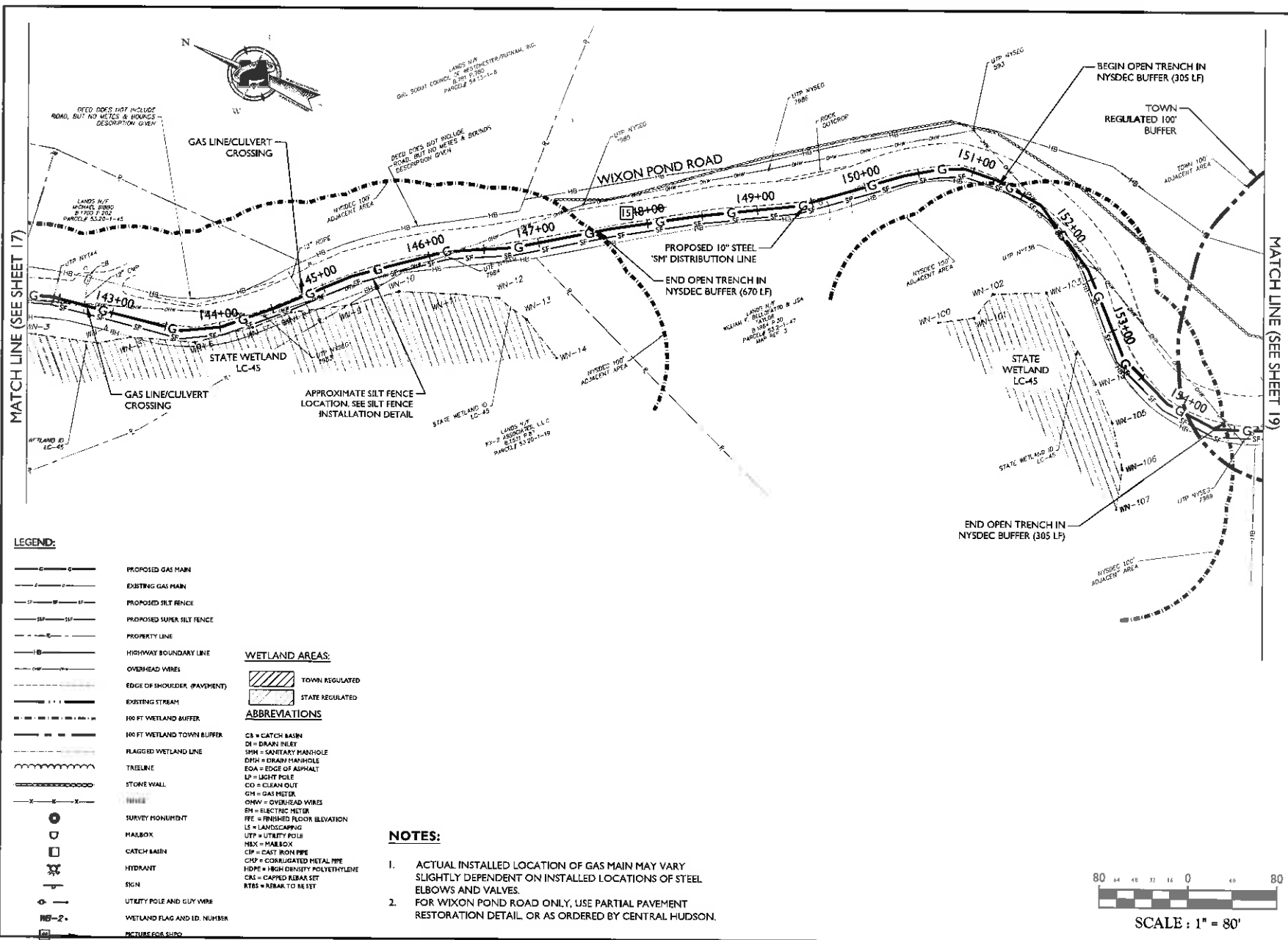












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2	09/07/17	DAE			

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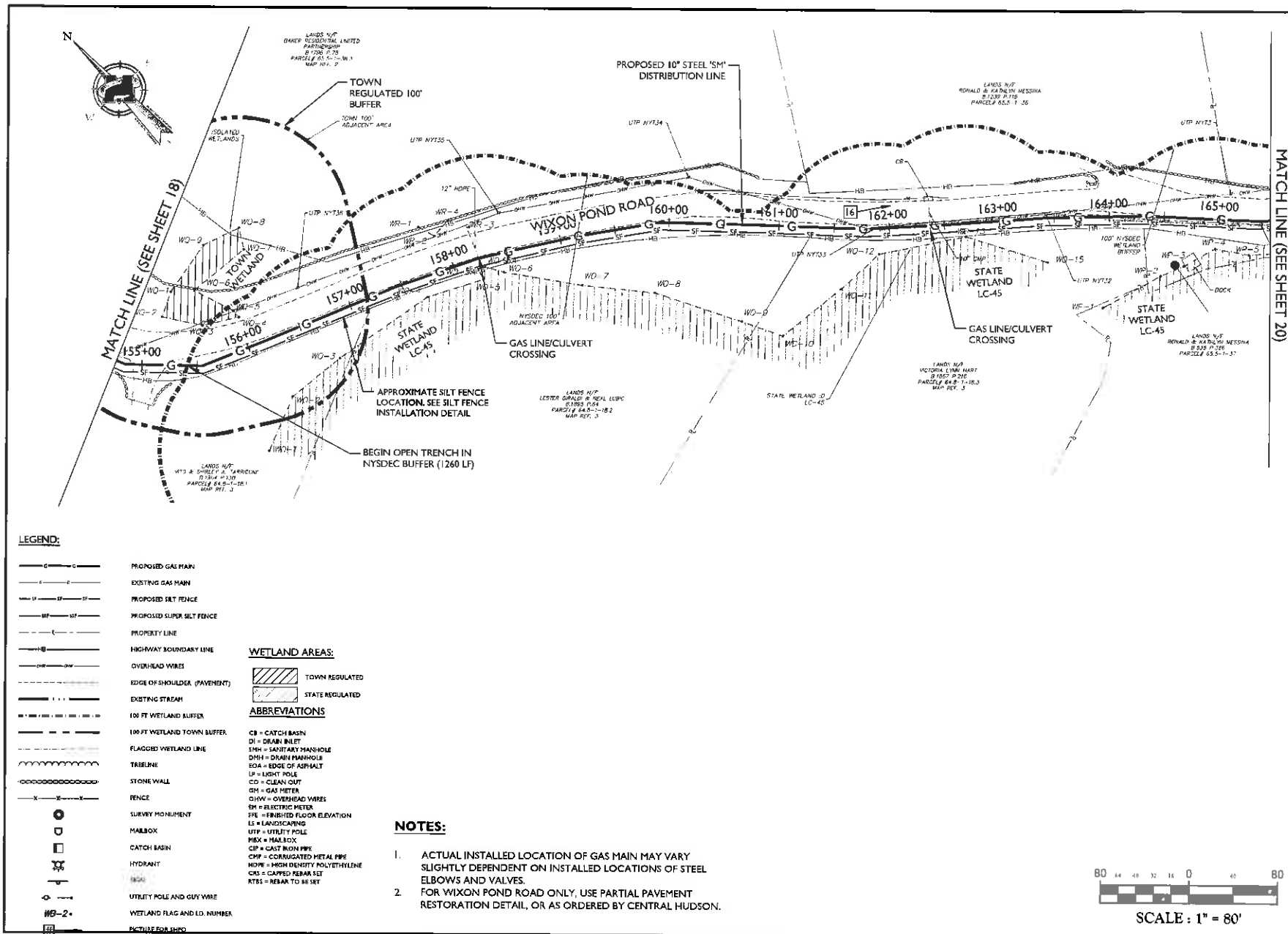
**PROJECT ROUTE DESIGN PLANS FOR**  
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**ALBANY OFFICE**  
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 Fax: 518-451-7230

DATE	DATE	DATE	DATE
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**GENERAL PLAN**  
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1	06/04/17	DAF	EDIT PER CHASE COMMENTS			
2	09/08/17	DAF	EDIT PER CHASE COMMENTS			

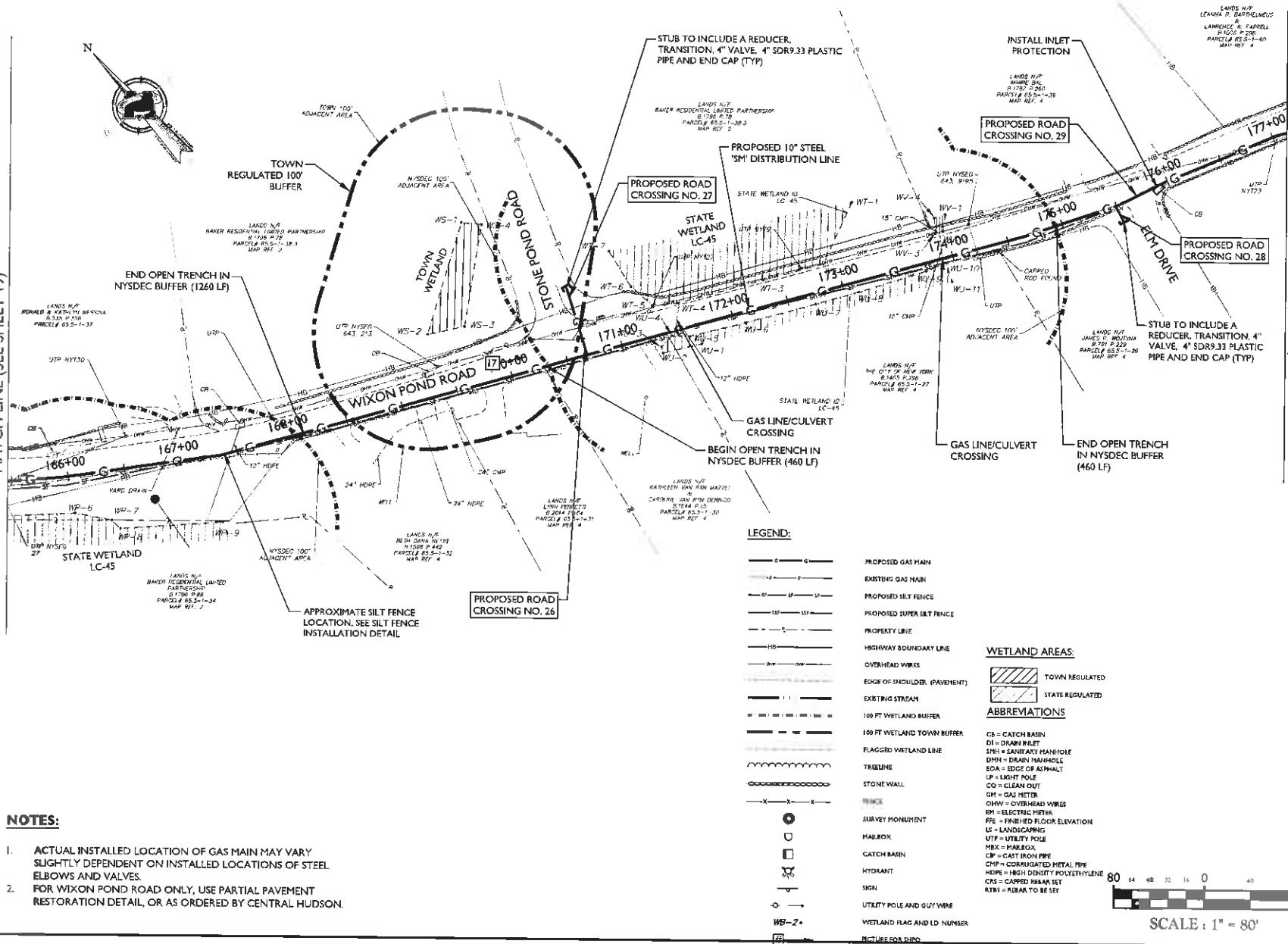
**BRETT D. REYNOLDS**  
 NEW YORK LICENSED PROFESSIONAL  
 ENGINEER - LICENSE NUMBER 1996

**PROJECT ROUTE DESIGN  
 PLANS  
 FOR**  
**Central Hudson**  
 S-M LINE GAS  
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 PUTNAM COUNTY, NY

**ALBANY OFFICE**  
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 Fax: 518.439.2591

**SCALE** 1" = 80'  
**DATE** 06/04/17  
**BY** DAF  
**PROJECT NAME** S-M LINE GAS REINFORCEMENT  
**CLIENT** CENTRAL HUDSON  
**PROJECT NUMBER** 19 OF 34

MATCH LINE (SEE SHEET 19)



MATCH LINE (SEE SHEET 21)

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1			DESIGN			
2			CONSTRUCTION			

**BRETT D. REYNOLDS**  
 NEW YORK LICENSED PROFESSIONAL  
 ENGINEER - LICENSE NUMBER 3096

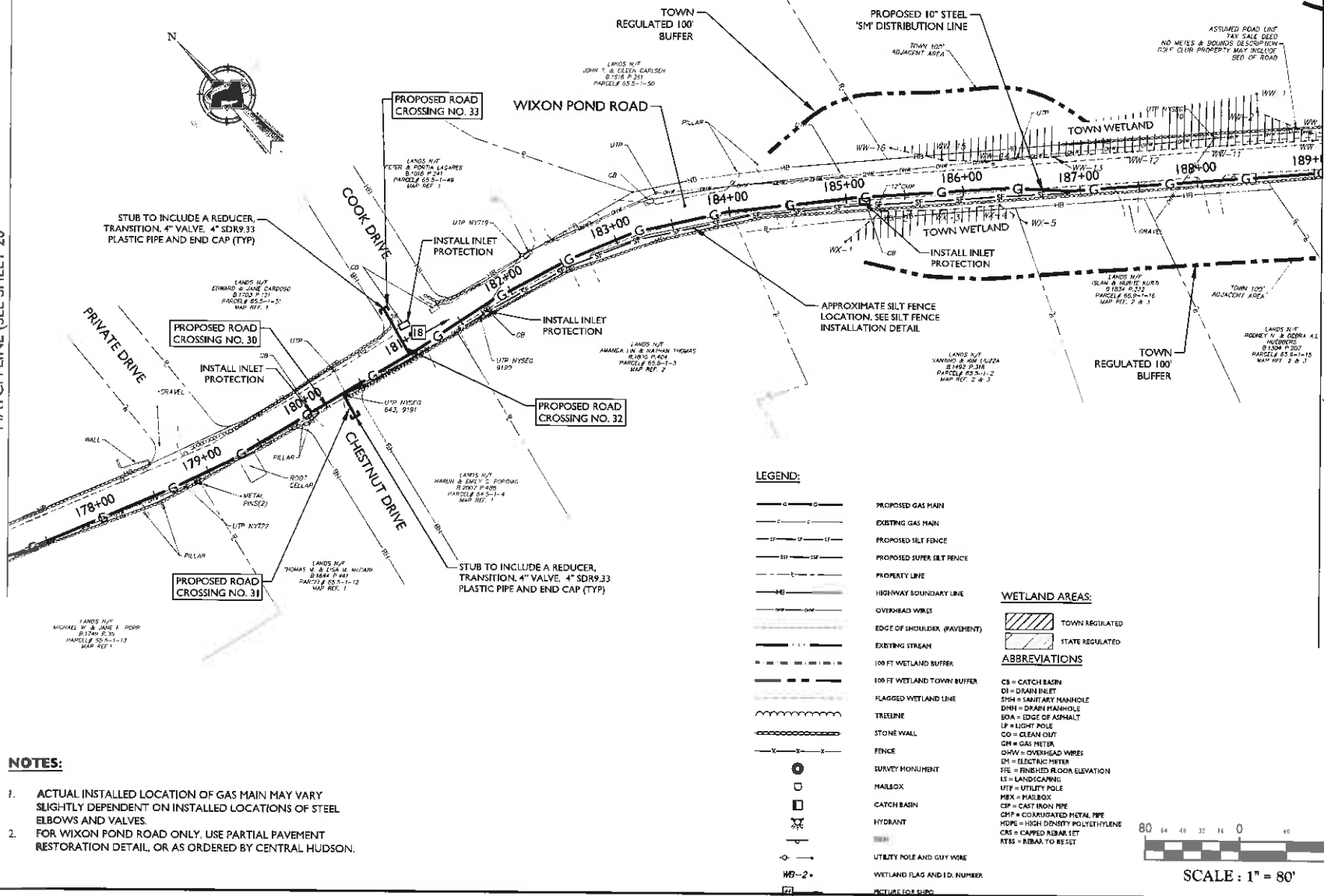
**PROJECT ROUTE DESIGN PLANS FOR**  
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 8-M LINE GAS REINFORCEMENT PROJECT  
 TOWN OF CARMBEL  
 PUTNAM COUNTY, NY

**ALBANY OFFICE**  
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SCALE	DATE	DESIGNED BY	CHECKED BY
AS SHOWN	04/20/17	DAF	BCM
PROJECT NUMBER	1500054A	FORNOLD	CLAYTON

**GENERAL PLAN (17 OF 20)**  
 20 of 34

MATCH LINE (SEE SHEET 20)



- NOTES:**
1. ACTUAL INSTALLED LOCATION OF GAS MAIN MAY VARY SLIGHTLY DEPENDENT ON INSTALLED LOCATIONS OF STEEL ELBOWS AND VALVES.
  2. FOR WIXON POND ROAD ONLY, USE PARTIAL PAVEMENT RESTORATION DETAIL, OR AS ORDERED BY CENTRAL HUDSON.

**LEGEND:**

- PROPOSED GAS MAIN
- EXISTING GAS MAIN
- PROPOSED SILT FENCE
- PROPOSED SUPER SILT FENCE
- PROPERTY LINE
- HIGHWAY BOUNDARY LINE
- OVERHEAD WIRE
- EDGE OF SHOULDER (PAVEMENT)
- EXISTING STREAM
- 100 FT WETLAND BUFFER
- 100 FT WETLAND TOWN BUFFER
- FLAGGED WETLAND LINE
- TREELINE
- STONE WALL
- FENCE
- SURVEY MONUMENT
- MAILBOX
- CATCH BASIN
- HYDRANT
- UTILITY POLE AND GUY WIRE
- WETLAND FLAG AND I.D. NUMBER
- PICTURE EQUI SUB

**WETLAND AREAS:**

- TOWN REGULATED
- STATE REGULATED

**ABBREVIATIONS**

- CB = CATCH BASIN
- DI = DRAIN INLET
- SMH = SANITARY MANHOLE
- DMH = DRAIN MANHOLE
- EDA = EDGE OF ASPHALT
- LP = LIGHT POLE
- CO = CLEAN OUT
- GR = GAS METER
- OWH = OVERHEAD WIRE
- EM = ELECTRIC METER
- RFE = FINISHED R.O.O.R. ELEVATION
- LS = LANDSCAPING
- UTP = UTILITY POLE
- MBX = MAILBOX
- CP = CAST IRON PIPE
- CHP = CORRUGATED METAL PIPE
- HDP = HIGH DENSITY POLYETHYLENE
- CRS = CAPPED REBAR SET
- RTSS = REBAR TO RESET



MATCH LINE (SEE SHEET 22)

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1	08/07/17	DAK	EDIT PRELIM PLANNING BOARD AND SET COMMENTS
2	09/06/17	DAK	EDIT PRELIM SET COMMENTS

**BRETT D. REYNOLDS**  
 NEW YORK LICENSED PROFESSIONAL  
 SURVEYOR LICENSE NUMBER 9996

**PROJECT ROUTE DESIGN PLANS FOR**  
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 TOWN OF CARMEL  
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**ALBANY OFFICE**  
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 Fax: 518-485-1286

DATE: 08/07/17	DATE: 09/06/17	DRAWN BY: DAK	CHECKED BY: BDR
PROJECT NUMBER: 15000424A	DRAWN FOR: CLEANT		

**GENERAL PLAN (18 OF 20)**

21 of 34



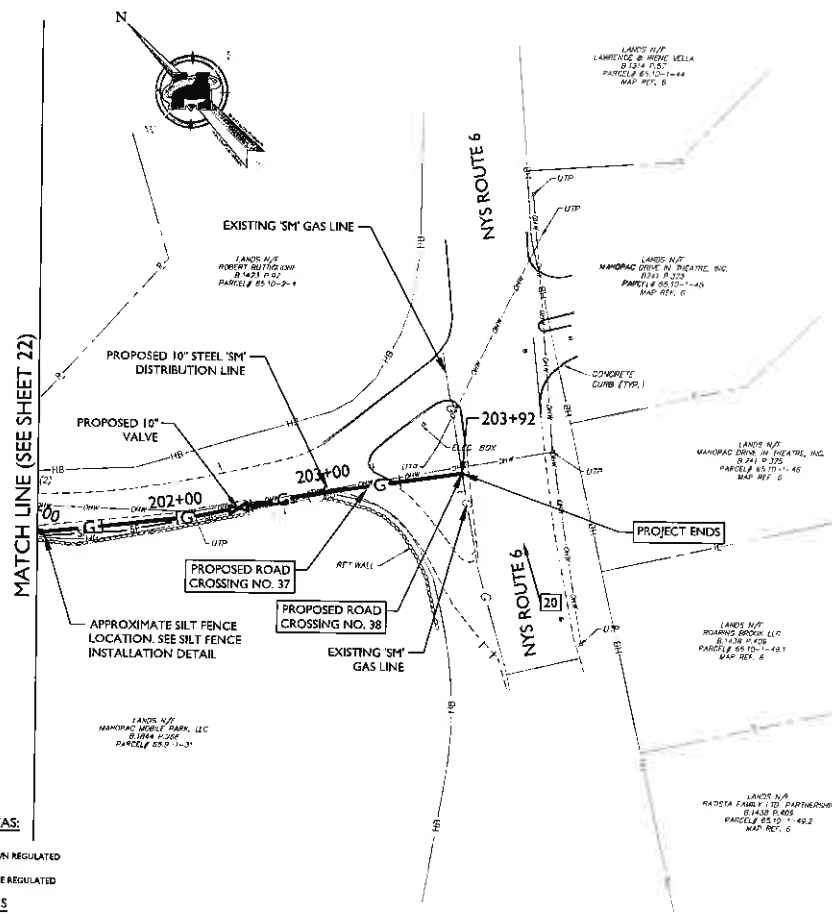
# LEGEND:

	PROPOSED GAS MAIN
	EXISTING GAS MAIN
	PROPOSED SILT FENCE
	PROPOSED SUPER SILT FENCE
	PROPERTY LINE
	HIGHWAY BOUNDARY LINE
	OVERHEAD WIRES
	EDGE OF SHOULDER (PAVEMENT)
	EXISTING STREAM
	100 FT WETLAND BUFFER
	100 FT WETLAND TOWN BUFFER
	FLAGGED WETLAND LINE
	TIE LINE
	STONE WALL
	FENCE
	SURVEY MONUMENT
	MANHOLE
	CATCH BASIN
	HYDRANT
	WETLAND FLAG AND ID NUMBER
	PICTURE FLAG SYMBOL

	TOWN REGULATED
	STATE REGULATED

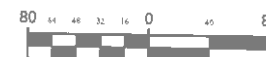
**ABBREVIATIONS**

CB	= CATCH BASIN
DI	= DRAIN INLET
SMH	= SANITARY MANHOLE
DMH	= DRAIN MANHOLE
EDA	= EDGE OF ASPHALT
LP	= LIGHT POLE
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OWH	= OVERHEAD WIRES
EM	= ELECTRIC METER
FTE	= FINISHED ELEVATION
LS	= LANDSCAPING
UTP	= UTILITY POLE
MBX	= MANHOLE
CIP	= CAST IRON PIPE
CHP	= CORRUGATED METAL PIPE
HDP	= HIGH DENSITY POLYETHYLENE
CRS	= CAPPED REBAR SET
KRS	= REBAR TO BE SET



## NOTES:

1. ACTUAL INSTALLED LOCATION OF GAS MAIN MAY VARY SLIGHTLY DEPENDENT ON INSTALLED LOCATIONS OF STEEL ELBOWS AND VALVES.
2. FOR WIXON POND ROAD ONLY, USE PARTIAL PAVEMENT RESTORATION DETAIL OR AS ORDERED BY CENTRAL HUDSON.



SCALE : 1" = 80'



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NO.	DATE	BY	DESCRIPTION
1	08/01/17	DAF	DESIGN
2	08/01/17	DAF	DESIGN
3	08/01/17	DAF	DESIGN
4	08/01/17	DAF	DESIGN
5	08/01/17	DAF	DESIGN
6	08/01/17	DAF	DESIGN
7	08/01/17	DAF	DESIGN
8	08/01/17	DAF	DESIGN
9	08/01/17	DAF	DESIGN
10	08/01/17	DAF	DESIGN

BRETT D. REYNOLDS  
NEW YORK LICENSED PROFESSIONAL  
ENGINEER - LICENSE NUMBER: 10000

PROJECT ROUTE DESIGN  
PLANS  
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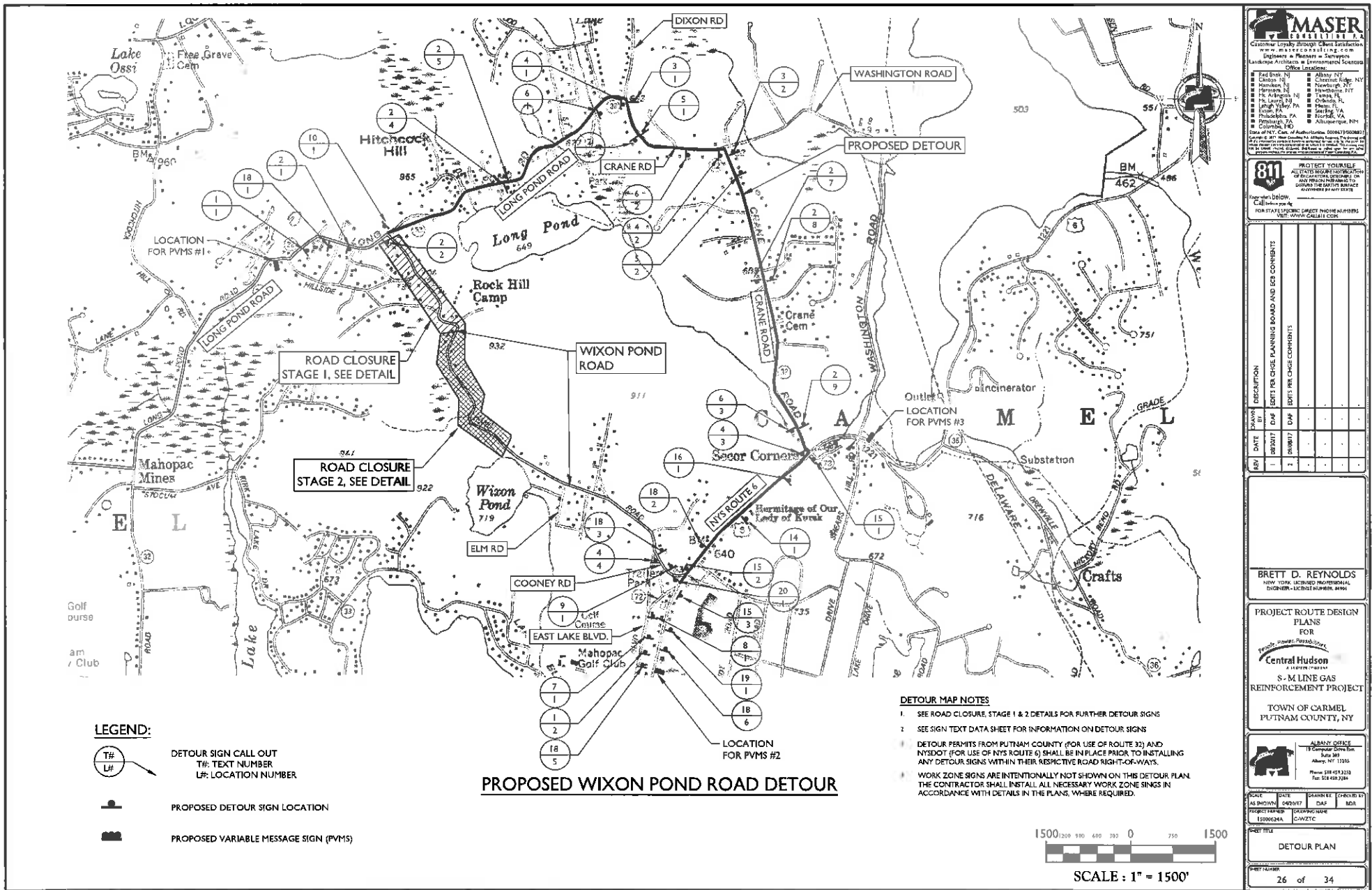
SCALE	DATE	DESIGNED BY	CHECKED BY
1" = 80'	08/01/17	DAF	DAF
PROJECT NUMBER	DESIGNED BY	CHECKED BY	DATE
100000000	DAF	DAF	08/01/17

GENERAL PLAN  
(SHEET 20 OF 20)









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Littleton, NJ	Putnamville, NY
Littleton, NJ	Putnamville, NY
Littleton, NJ	Putnamville, NY

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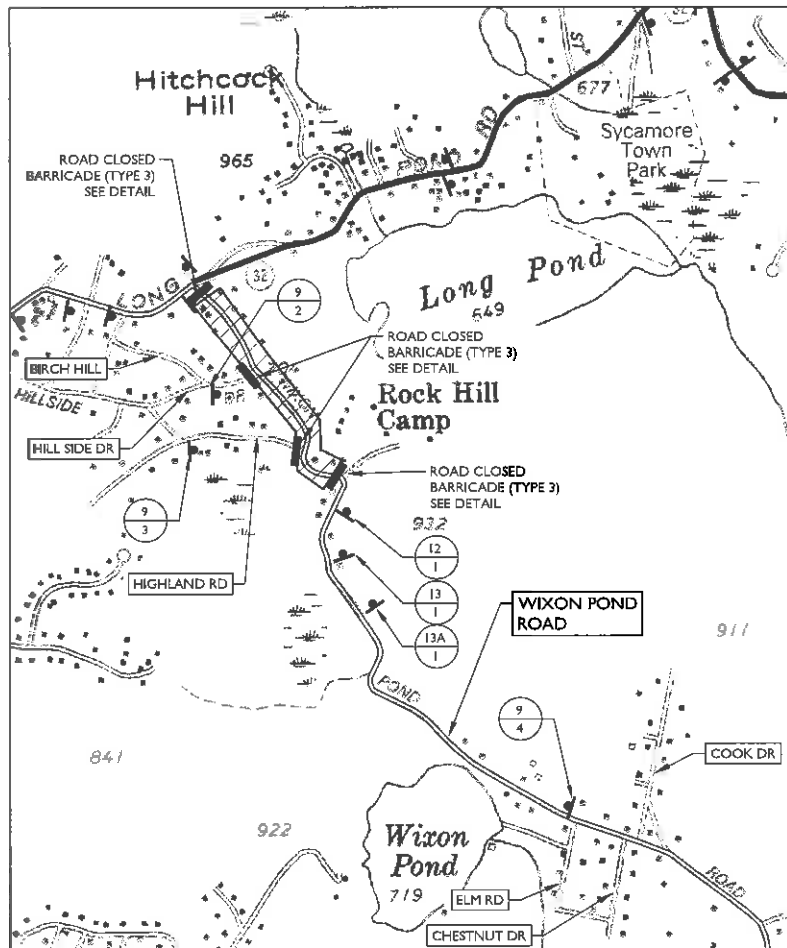
**PROJECT ROUTE DESIGN PLANS FOR**  
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 TOWN OF CARMEL, PUTNAM COUNTY, NY

**ALBANY OFFICE**  
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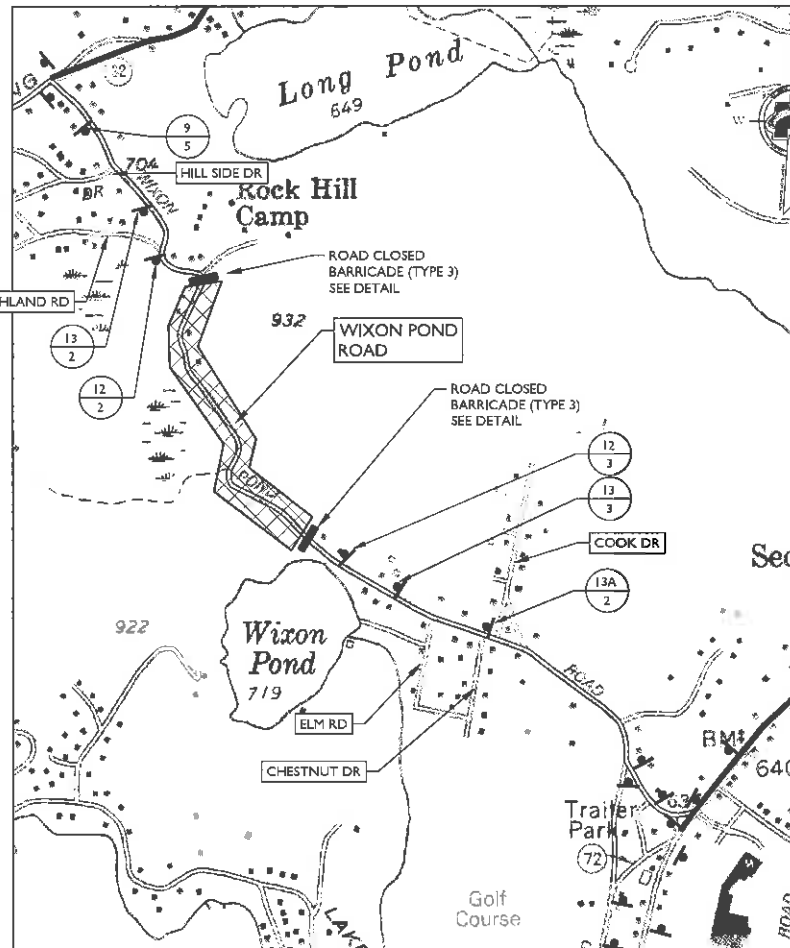
**DATE:** 04/20/17 **DATE:** 04/20/17 **DATE:** 04/20/17  
**AS SHOWN:** **BY:** **BY:** **BY:**  
**PROJECT NUMBER:** 120000000 **PROJECT NAME:** 120000000

**SHEET TITLE:** DETOUR PLAN

**SHEET NUMBER:** 26 of 34



**ROAD CLOSURE - STAGE 1  
WIXON POND ROAD DETOUR**



**ROAD CLOSURE - STAGE 2  
WIXON POND ROAD DETOUR**

**LEGEND:**



DETOUR SIGN CALL OUT  
TH: TEXT NUMBER  
LR: LOCATION NUMBER



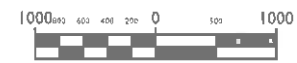
PROPOSED DETOUR SIGN LOCATION



BARRICADE (TYPE 3) - SEE DETAIL

**STAGED DETOUR MAP NOTES**

1. SEE DETOUR PLAN FOR FURTHER DETOUR SIGNS
2. SEE SIGN TEXT DATA SHEET FOR INFORMATION ON DETOUR SIGNS
3. WORK ZONE SIGNS ARE INTENTIONALLY NOT SHOWN ON THIS DETOUR PLAN. THE CONTRACTOR SHALL INSTALL ALL NECESSARY WORK ZONE SIGNS IN ACCORDANCE WITH DETAILS IN THE PLANS, WHERE REQUIRED.



SCALE: 1" = 1000'

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Albany, NY	Albany, NY

State of NY, Dept. of Transportation 6088121000000000  
Contract: 2017-2018 State of NY, Dept. of Transportation  
Project: 2017-2018 State of NY, Dept. of Transportation  
Contract: 2017-2018 State of NY, Dept. of Transportation  
Project: 2017-2018 State of NY, Dept. of Transportation

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2	08/08/17	REVISED PER CHANCE PLANNING BOARD AND DEC COMMENTS

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DESIGNER - LICENSE NUMBER 5190

**PROJECT ROUTE DESIGN PLANS FOR**  
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**ALBANY OFFICE**  
11 Corporate Center Blvd.  
Albany, NY 12215  
Phone: 518.639.2122  
Fax: 518.639.2266

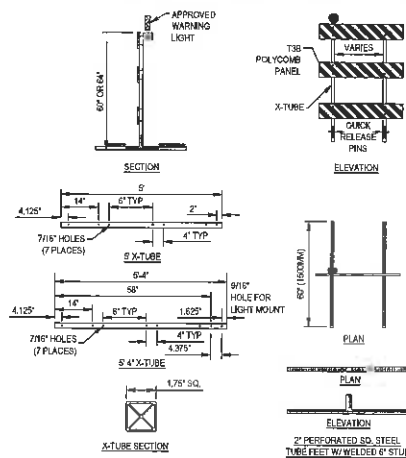
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08/01/17	08/01/17	08/01/17	08/01/17
08/01/17	08/01/17	08/01/17	08/01/17
08/01/17	08/01/17	08/01/17	08/01/17

**ROAD CLOSURE PLAN**

27 of 34

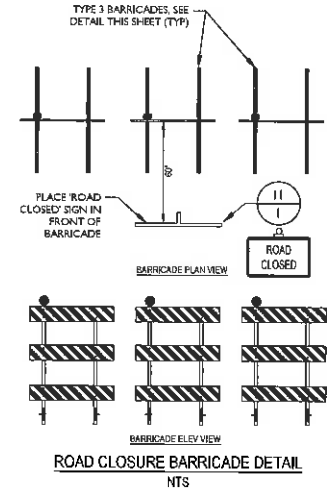
TEXT #	LOCATION	TEXT	DESIGNATION AND COLOR	SIZE AREA
1	1, 2	DETOUR AHEAD	W20-2	36" X 36" (9.0 S.F.)
2	1, 3, 4, 5, 6, 7, 8, 9	DETOUR WIXON POND RD ↑	M4-B D3-1 M6-3	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)
3	1, 2	DETOUR WIXON POND RD ←	M4-B D3-1 M6-1L	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)
4	1, 2, 3, 4	DETOUR WIXON POND RD →	M4-B D3-1 M6-1R	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)
5	1, 2	DETOUR WIXON POND RD ↙	M4-B D3-1 M5-1L	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)
6	1, 2, 3	DETOUR WIXON POND RD ↘	M4-B D3-1 M5-1R	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)
7	1	DETOUR WIXON POND RD ↗	M4-B D3-1 M5-2L	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)
8	1	DETOUR WIXON POND RD ↖	M4-B D3-1 M5-2L	24" X 12" (2.0 S.F.) 66" X 12" (5.5 S.F.) 21" X 15" (2.2 S.F.)

TEXT #	LOCATION	TEXT	DESIGNATION AND COLOR	SIZE AREA
9	1-7	WIXON POND RD ROAD CLOSED MILE AHEAD LOCAL TRAFFIC ONLY	D3-1 R11-3A (BLACK ON WHITE)	66" X 12" (5.5 S.F.) 60" X 30" (12.5 S.F.)
10	1	WIXON POND RD END DETOUR	D3-1 M4-BA	66" X 12" (5.5 S.F.) 24" X 12" (2.0 S.F.)
11	SEE BARRICADE DETAIL	ROAD CLOSED	R11-2 (BLACK ON WHITE)	24" X 18" (3.0 S.F.)
12	1-3	ROAD CLOSED 500 FT	W20-3	36" X 36" (9.0 S.F.)
13	1-3	ROAD CLOSED 1000 FT	W20-3	36" X 36" (9.0 S.F.)
13A	1-3	ROAD CLOSED 2000 FT	W20-3	36" X 36" (9.0 S.F.)



TYPE 3 BARRICADE DETAIL

TEXT #	LOCATION	TEXT	DESIGNATION AND COLOR	SIZE AREA
14	1-2	DETOUR WIXON POND RD ↑	D3-1 M4-B M6-2L	64" X 18" (10.5 S.F.) 36" X 18" (4.5 S.F.) 30" X 21" (4.4 S.F.)
15	1-3	DETOUR WIXON POND RD ←	D3-1 M4-B M6-1R	64" X 18" (10.5 S.F.) 36" X 18" (4.5 S.F.) 30" X 21" (4.4 S.F.)
16	1	DETOUR WIXON POND RD ↙	D3-1 M4-B M5-2L	64" X 18" (10.5 S.F.) 36" X 18" (4.5 S.F.) 30" X 21" (4.4 S.F.)
18	1	WIXON POND RD ROAD CLOSED MILE AHEAD LOCAL TRAFFIC ONLY	D3-1 R11-3A (BLACK ON WHITE)	64" X 18" (10.5 S.F.) 66" X 30" (12.5 S.F.)
19	1	DETOUR AHEAD	W20-2	48" X 48" (16.0 S.F.)
20	1	WIXON POND RD END DETOUR	D3-1 M4-BA	66" X 12" (5.5 S.F.) 24" X 12" (2.0 S.F.)



NOTES:

- ALL SIGNS, INSTALLATION, REMOVAL AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH NYSOT STANDARD SPECIFICATION FOR ITEM NO. B19.D1.
- ALL SIGNS SHALL BE BLACK ON ORANGE, UNLESS OTHERWISE NOTED (SEE SIGNS R11-3A AND R11-2).
- THE DISTANCES FOR SIGNS 1-17, 1-24, AND 1-53 SHALL BE 1/2 MILE, 0.1 MILE, AND 1.6 MILES (RESPECTIVELY).

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---	--

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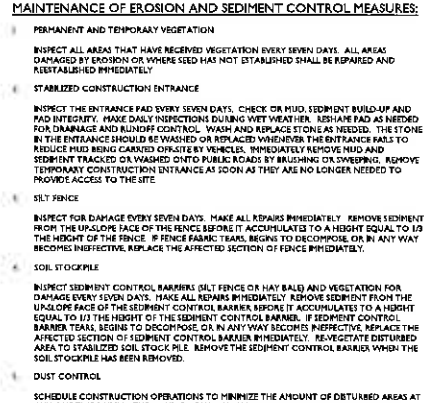
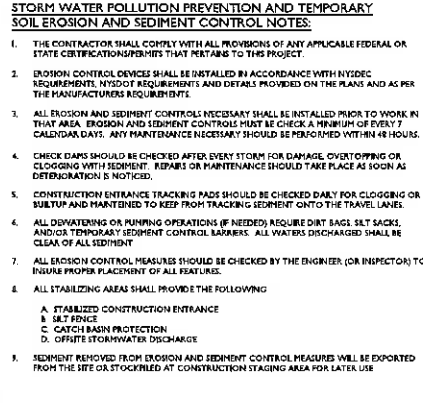
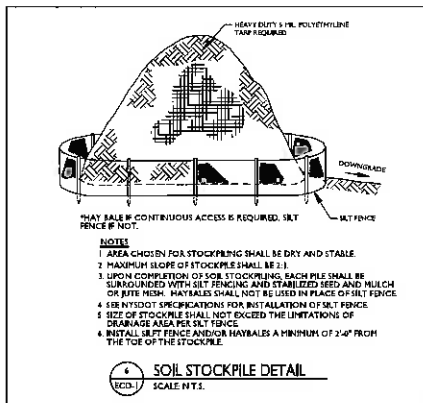
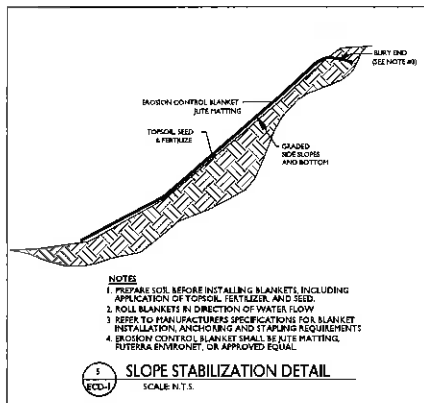
DATE	DESCRIPTION
10/10/17	REVISION: SEE CHG. PLANNING BOARD AND CCS COMMENTS
10/10/17	REVISION: SEE CHG. COMMENTS
10/10/17	REVISION: SEE CHG. COMMENTS

BRETT D. REYNOLDS  
NEW YORK LICENSED PROFESSIONAL  
ENGINEER, LICENSE NUMBER: 19950

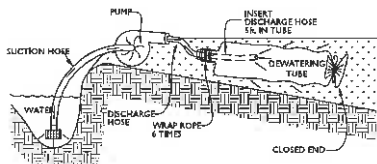
PROJECT ROUTE DESIGN  
PLANS  
FOR  
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S-M LINE GAS  
REINFORCEMENT PROJECT  
TOWN OF CARMEL  
PUTNAM COUNTY, NY

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PROJECT NUMBER	0000000000	DATE PREPARED	0000000000	DATE
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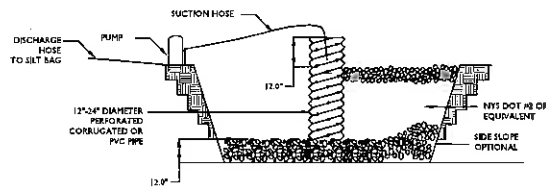


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- NOTES**
1. **INSTALLATION AND USE**
    - A. PLACE DEWATERING TUBE ON THE GROUND OR ON A RELATIVELY LEVEL STABILIZED AREA.
    - B. INSERT DISCHARGE PIPE A MINIMUM OF 1 FT. INSIDE DEWATERING TUBE AND SECURE PER MANUFACTURER'S RECOMMENDATIONS.
    - C. EMPTY DEWATERING TUBE WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL AMOUNT.
    - D. A Suction Hose with a 1/2" ID and APPROVED EQUAL SHOULD BE USED ANYTIME WATER IS PUMPED ON THE SITE. THE PURPOSE OF A DEWATERING TUBE IS TO COLLECT SEDIMENT CONTAINED IN THE DISCHARGED WATER, TO PREVENT THE SCOUR AND BROKEN FROM WATER EXITING A PIPE AT HIGH VELOCITY, TO DISBURSE THE WATER OVER A WIDER AREA TO MINIMIZE EROSION AS THE WATER DRAINS AWAY, AND TO RETAIN OIL CONTAINED WITHIN EFFLUENT.
  2. **MAINTENANCE AND DISPOSAL**
    - A. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AWAY FROM WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS. OPEN BOTH ENDS OF THE DEWATERING TUBE, PICK IT UP IN THE CENTER AND DUMP ACCUMULATED SEDIMENT OUT OF BOTH ENDS. ALLOW TO DRY AND STONE FOR REUSE OR, AS DIRECTED BY ENGINEER OR INSPECTOR.

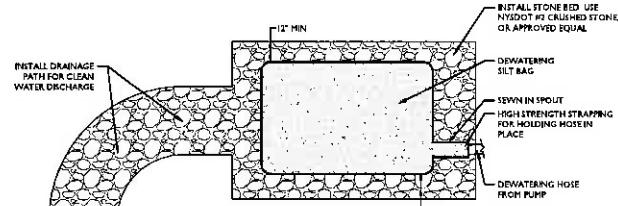
1 DEWATERING TUBE DETAIL  
SCALE: N.T.S.



### CONSTRUCTION SPECIFICATIONS

1. PIT DIMENSIONS ARE OPTIONAL.
2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12-24" DIAMETER CORRUGATED OR PVC PIPE.
3. A BASE OF 2" AGGREGATE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD BE BACKFILLED WITH 2" AGGREGATE.
4. THE STANDPIPE SHOULD EXTEND 12-18" ABOVE THE TOP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE SHOULD BE WRAPPED WITH FILTERCLOTH BEFORE INSTALLATION. IF DESIRED, 1/4"-1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE PRIOR TO ATTACHING THE FILTERCLOTH.

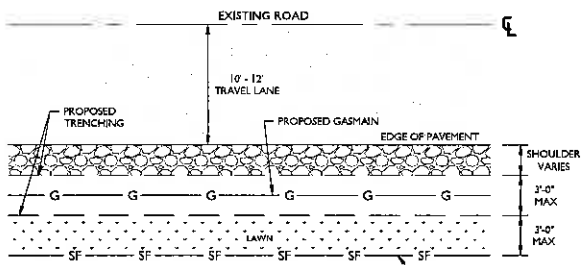
2 PUMP PIT FOR TEMPORARY DEWATERING  
SCALE: N.T.S.



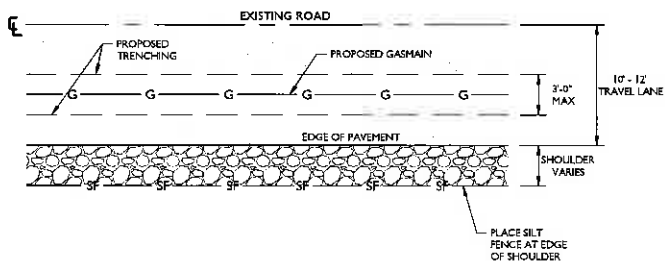
PLAN VIEW

PROFILE VIEW

3 SEDIMENT BAG DETAIL  
SCALE: N.T.S.



### GAS MAIN IN-SHOULDER INSTALLATION



### GAS MAIN IN ROAD INSTALLATION

**NOTE:**  
SILT FENCE IS NOT REQUIRED IF THE SHOULDER IS HIGHER IN ELEVATION THAN THE EXISTING ROAD. THE SHOULDER IS A ROCK OUTCROPPING, OR IF A STONE WALL EXISTS WITHIN 3' OF THE EDGE OF PAVEMENT.

4 TYPICAL SILT FENCE INSTALL DETAIL  
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2	09/06/17	EDITS FOR CHANCE PLANNING ROAD AND FOR COMMENTS		

**BRETT D. REYNOLDS**  
NEW YORK LICENSED PROFESSIONAL  
ENGINEER - LICENSE NUMBER 34964

**PROJECT ROUTE DESIGN PLANS FOR**  
**Central Hudson**  
A S-CORP COMPANY  
8-M LINE GAS REINFORCEMENT PROJECT  
TOWN OF CARMEL  
PUTNAM COUNTY, NY

**ALBANY OFFICE**  
15 Commercial Drive East  
Albany, NY 12205  
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Fax: 518-459-2284

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AS SHOWN	04/01/17	DAP	BDK
PROJECT NUMBER	15000021-A	CLIENT NAME	CHS

### SOIL EROSION & SEDIMENT CONTROL PLAN

1. **CONTRACTOR TO COORDINATE ARRANGEMENT OF EQUIPMENT, CONSTRUCTION MATERIALS, AND FUELING AREAS WITHIN STAGING AREA WITH CENTRAL HUDSON BEFORE START OF CONSTRUCTION.**
2. **STAGING AREA SHALL BE INSTALLED PRIOR TO OTHER OPERATIONS ON THE SITE.**
3. **ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING, BUT NOT LIMITED TO SILT FENCE, STABILIZATION, DUST CONTROL AND CONSTRUCTION FENCING.**
4. **ALL CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE PLACED ON PAVED SURFACES TO PREVENT ANY POTENTIALLY LEAKING FLUIDS/OILS/GAS FROM SEEPING INTO SOILS. IF EQUIPMENT IS PLACED ON SOIL OR GRAVEL A LAYER OF POLY-LYNER SHALL BE PLACED ON GROUND FOR PROTECTION FROM FLUIDS/OILS/GAS LEAKS.**
5. **THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION AND LOT OWNER.**
6. **STAGING AREA SHALL BE KEPT NEAT AND CLEAN AT ALL TIMES.**

1. FUEL HANDLING AND STORAGE FACILITIES WILL COMPLY WITH APPLICABLE FEDERAL AND STATE REGULATIONS
2. ABOVE-GROUND BULK STORAGE: WITH THE EXCEPTION OF MOBILE TANK TRUCKS, THESE UNITS WILL HAVE SECONDARY CONTAINMENT OR BE ADEQUATELY BERMED WITH IMPERVIOUS MATERIAL TO CONTAIN A POTENTIAL LOSS FROM COMPLETE TANK FAILURE.
3. FUELS USED IN THE CONSTRUCTION PROCESS WILL BE STORED AT SPECIFIED EQUIPMENT STAGING AREAS. WHERE PRACTICAL, REFUELING WILL BE CONDUCTED AT THE STAGING AREAS.
4. IF REFUELING ALONG THE ROW IS REQUIRED, FUEL WILL BE TRUCKED IN USING APPROPRIATE EQUIPMENT AND APPROPRIATE ENVIRONMENTAL PRECAUTIONS TAKEN AS OUTLINED BELOW:
  - A. FUEL TANKS OF SUCH EQUIPMENT WILL BE INITIALLY FILLED IN AN UPLAND LOCATION GREATER THAN 100 FEET FROM WETLANDS OR STREAMS TO MINIMIZE THE AMOUNT OF REFUELING WITHIN THESE SENSITIVE AREAS.
  - B. ABSORBENT PADS OR PORTABLE BASINS WILL BE DEPLOYED UNDER THE REFUELING OPERATION. IN ADDITION, THE FUEL NOZZLE WILL BE WRAPPED AN ABSORBENT PAD AND THE NOZZLE WILL BE PLACED IN A SECONDARY CONTAINMENT VESSEL (E.G., BUCKET) WHEN MOVING THE NOZZLE FROM THE FUEL TRUCK TO THE EQUIPMENT TO BE REFUELED.
  - C. CREWS WILL HAVE SUFFICIENT SPILL CONTAINMENT EQUIPMENT ON HAND AT THE SECONDARY CONTAINMENT LOCATION TO PROVIDE PROMPT CONTROL AND CLEANUP IN THE EVENT OF A RELEASE.
5. THE HANDLING, TRANSPORTATION, STORAGE AND DISPOSAL OF OIL FUELS, USED OILS, AND (IF ANY) HAZARDOUS WASTES WILL BE CONDUCTED IN AN ENVIRONMENTALLY SAFE MANNER. ANY HAZARDOUS SUBSTANCES WILL BE TRANSPORTED, STORED, AND HANDLED AS RECOMMENDED BY THE SUPPLIERS AND/OR MANUFACTURERS AND IN COMPLIANCE WITH ALL APPLICABLE FEDERAL OR STATE REGULATIONS.
6. CONSTRUCTION STAGING AND LAY DOWN AREAS WILL HAVE AN ADEQUATE SUPPLY OF SUITABLE ABSORBENT MATERIAL AND ANY OTHER SUPPLIES AND EQUIPMENT NECESSARY TO IMMEDIATELY CLEAN-UP INADVERTENT WASTE OR FUEL SPILLS. SPILL KITS SHALL BE KEPT IN CONSTRUCTION VEHICLES AND AT STAGING AREAS WHERE EQUIPMENT IS STORED.

I. UNLESS OTHERWISE AUTHORIZED BY BOTH CENTRAL HUDSON AND TOWN OF CARMEL, ALL EQUIPMENT SHALL BE STORED AT STAGING AREA. CONTRACTOR SHALL MOBILIZE AND DEMOBILIZE EQUIPMENT DAILY. NO EQUIPMENT OR MATERIAL, OTHER THAN TRAFFIC WORK ZONE SIGNAGE, SHALL BE LEFT ON ROAD SIDES OR IN WORK ZONES AT THE END OF EACH WORKDAY.



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- |               |  |                                     |           |
|---------------|--|-------------------------------------|-----------|
| GAS STANDARDS |  | CENTRAL HUDSON GAS & ELECTRIC CORP. | DATE 9/15 |
| DRAWN CWA     |  |                                     | ISSUE 3   |
| CLEAR MFB     |  | TRENCHING AND BACKFILL REQUIREMENTS | APP. KBR  |
| ENGR. RJS     |  | DISTRIBUTION MAINS                  | APP. LUC  |
| APP. QMD      |  |                                     |           |



1. THIS PROJECT REQUIRES THE PLACEMENT OF A PROPOSED GAS MAIN TO BE PLACED ALONGSIDE AND/OR UNDER THE ADJACENT STATE HIGHWAY (UNDER INTERSECTING ROADWAYS AND DRIVEWAYS). THE PROPOSED GAS LOCATION WILL BE WITHIN THE NYSOT R.O.W. AND CONFORM TO ALL FEDERAL REGULATIONS GOVERNING GAS PIPE INSTALLATION (TITLE 49, PART 192). THE PROPOSED PIPE DESIGN CRITERIA FOR THIS PROJECT IS AS FOLLOWS:

MEDIUM: NATURAL GAS  
OPER. PRESS: 120 PSIG  
PIPE: 10" STEEL

ALL GAS WORK SHALL BE PERFORMED TO CENTRAL HUDSON GAS AND ELECTRIC CORPORATION STANDARDS OPERATING AND MAINTENANCE PLAN AND GAS CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL TESTING OF NEW GAS PIPING, INCLUDING INSTALLATION OF ANY NECESSARY TESTING PIECES UNDER THE DIRECTION OF A CENTRAL HUDSON GAS AND ELECTRIC CORPORATION REPRESENTATIVE.

1. ALL PROPOSED TRENCHES SHALL BE PLACED AT THE APPROPRIATE DEPTHS SHOWN ON THE GENERAL PLANS, DETAILS AND APPROVED BY THE HIGHWAY PERMIT. MINIMUM SEPARATION OF 1'-0" HORIZONTAL AND/OR 1'-0" VERTICAL FROM EXISTING UNDERGROUND UTILITIES (INCLUDING EXISTING STORMWATER CATCH BASINS, PIPES, ETC.) SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. ANY LOCATIONS NOT MEETING THESE CRITERIA SHALL BE APPROVED PRIOR TO INSTALLATION AND CLEARLY DOCUMENTED ON AS-BUILT DRAWINGS. WARNING TAPE AND LINE MARKERS SHALL BE INSTALLED AT ALL PIPE PLACEMENTS.
2. ALL TRENCHING ACTIVITIES SHOULD BE BACKFILLED (OR STEEL PLATED WITH PINS AND EDGE RAFFING) AND TEMPORARILY STABILIZED AT THE END OF EACH WORK DAY.
3. THE CONTRACTOR IS REQUIRED TO MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES. WORK SHALL BE SCHEDULED AND PROGRESSED TO ALLOW FOR EMERGENCY VEHICLE ACCESS AT ALL TIMES.
4. ALL TRENCH DEPTHS, COMPACTION, AND BACKFILL MATERIALS SHALL BE AS NOTED IN TRENCH DETAILS. ALL BACKFILL MATERIALS SHALL CONFORM TO NYSDOT STANDARDS (AND AS DETAILD IN THIS PLAN SET) AND BE OBTAINED FROM APPROVED NYSDOT SOURCES. MATERIAL TICKETS ARE REQUIRED TO BE SUPPLIED TO CENTRAL HUDSON AT THE END OF CONSTRUCTION.
5. ALL EXCAVATIONS REQUIRE A MEANS OF INGRESS AND EGRESS NO MORE THAN 25'-0" APART. LADDERS USED TO SATISFY THESE REQUIREMENTS MUST EXTEND A MINIMUM OF 42" ABOVE GRADE. EXCAVATIONS 5'-0" OR MORE IN DEPTH SHALL BE PROTECTED BY MEANS OF SHEETING AND SHORING, BENCHING OR SLOPING ACCORDING TO OSHA REGULATIONS. ALL TRENCH EXCAVATION PROTECTION SYSTEMS SHALL MEET THE REQUIREMENTS OF OSHA REGULATIONS.
6. THE CONTRACTOR MAY BE INSTRUCTED TO INSTALL TRENCH BREAKS ALONG THE GAS PIPE TRENCH ANYWHERE THE TRENCH EXCEEDS 5% GRADE TO MINIMIZE FLOW ALONG THE PIPELINE.
7. WHERE TRENCHING LIES WITHIN EXISTING SWALES, PROPER DEPTH SHALL BE MAINTAINED BELOW THE BOTTOM OF THE SWALE. THE CONTRACTOR IS REQUIRED TO MAINTAIN SWALE FLOW AT ALL TIMES IN A MANNER TO PRECLUDE FLOW FROM ENTERING ONTO THE TRAVEL LANE.
8. ANY DRAINAGE STRUCTURES OR PIPES DAMAGED IN THE COURSE OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER OR REGULATORY AGENCY.
9. ALL UTILITIES ENCOUNTERED DURING TRENCHING OPERATIONS SHALL BE PROTECTED, MAINTAINED, SUPPORTED, AND SATISFACTORILY BACKFILLED ACCORDING TO THE UTILITY OWNERS REQUIREMENTS. SHOULD ANY UTILITY DAMAGED BY THE CONTRACTOR OR DURING THE COURSE OF PERFORMING WORK OPERATIONS, THE OWNER OF THE UTILITY SHALL BE NOTIFIED IMMEDIATELY TO OVERSEE AND SUPERVISE REPAIR TRENCHING, PIPE PLACEMENT, AND BACKFILL OPERATIONS SHALL ALLOW FOR SAFE AREAS TO PERFORM ANY NECESSARY REPAIRS.

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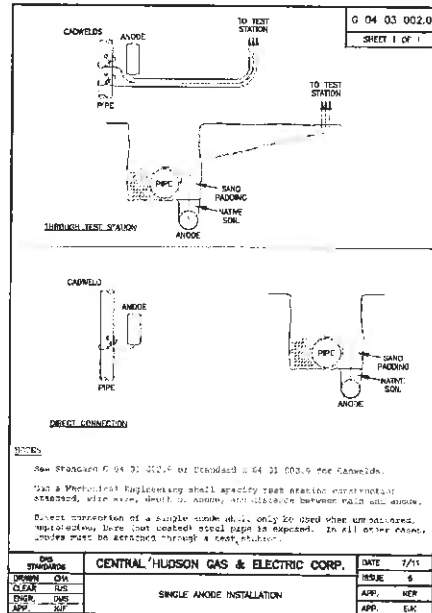
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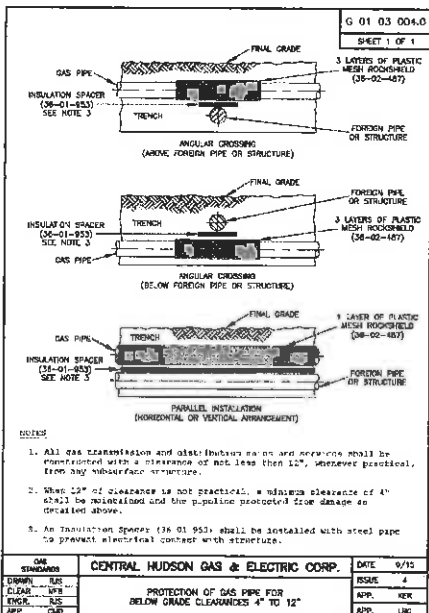
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(SHEET 1 OF 2)



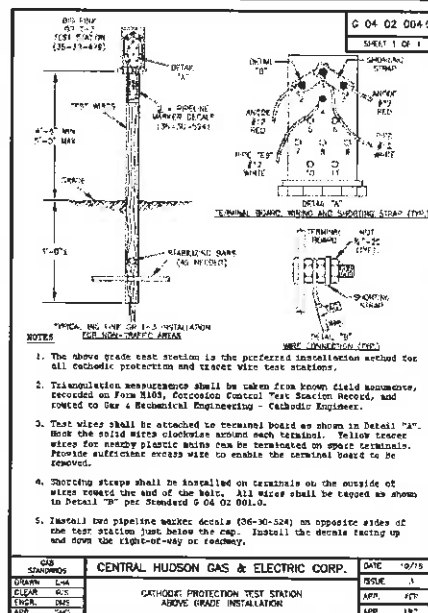
**6 ANODE DETAIL (AS REQUIRED PER CHGE)**  
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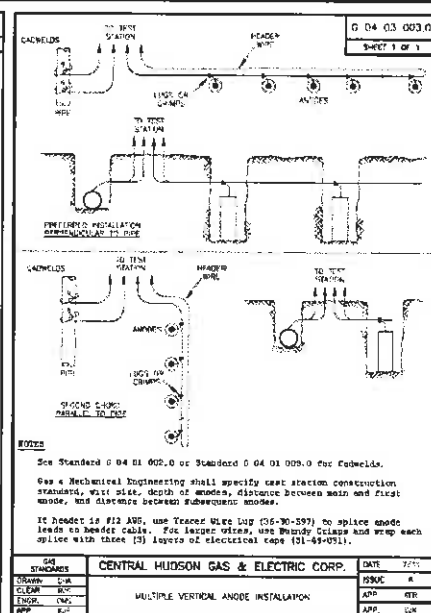
**7 PIPE CROSSING DETAIL**  
SCALE: N.T.S.

NOTE:

- IF EXISTING UTILITY PIPING IS FOUND IN POOR CONDITION ONCE EXPOSED, OR 12" MIN OF SEPARATION CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY CENTRAL HUDSON AND THE MUNICIPALITY OWNING THE UTILITY. CONTRACTOR MAY BE REQUIRED TO REPAIR/REPLACE EXISTING UTILITY ON THE DIRECTION OF MUNICIPALITY AND CENTRAL HUDSON.



**8 TEST STATION DETAIL**  
SCALE: N.T.S.



**9 MULTIPLE ANODE INSTALLATION DETAIL**  
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2	09/08/17	DATE PER CHGE COMMENTS

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NEW YORK LICENSED PROFESSIONAL  
ENGINEER - LICENSE NUMBER: 19868

**PROJECT ROUTE DESIGN PLANS**  
FOR  
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A FORTHEM COMPANY  
**S-M LINE GAS REINFORCEMENT PROJECT**  
TOWN OF CARMEL  
PUTNAM COUNTY, NY

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Fax: 516-451-3244

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158662NA	04/25/17	DAF	BCB

**GENERAL DETAILS**  
(SHEET 2 OF 2)

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## FRAC-OUT CONTINGENCY PLAN (FCP):

### 1.0 INTRODUCTION AND PURPOSE

DIRECTIONAL BORE OPERATIONS HAVE A POTENTIAL TO RELEASE DRILLING FLUIDS INTO THE SURFACE ENVIRONMENT THROUGH FRAC-OUTS. (A FRAC-OUT IS THE CONDITION WHERE DRILLING MUD IS RELEASED THROUGH FRACTURED SUBSURFACE SOIL AND TRAVELS TOWARD THE SURFACE.) BECAUSE DRILLING FLUIDS CONSIST LARGELY OF A BENTONITE CLAY-WATER MIXTURE, THEY ARE NOT CLASSIFIED AS TOXIC OR HAZARDOUS SUBSTANCES.

WHILE DRILLING FLUID SEEPAGE ASSOCIATED WITH A FRAC-OUT IS MOST LIKELY TO OCCUR NEAR THE BORE ENTRY AND EXIT POINTS WHERE THE DRILL HEAD IS SHALLOW, FRAC-OUTS CAN OCCUR IN ANY LOCATION ALONG A DIRECTIONAL BORE. THIS FRAC-OUT CONTINGENCY PLAN (FCP) ESTABLISHES OPERATIONAL PROCEDURES, PREVENTION, CONTAINMENT, AND CLEAN-UP OF FRAC-OUTS ASSOCIATED WITH THE PROPOSED DIRECTIONAL DRILLING PROJECT. CONTRACTOR FOR THE HORIZONTAL DIRECTIONAL DRILLING PORTION WILL ADHERE TO THIS PLAN DURING THE DIRECTIONAL DRILLING PROCESS.

THE SPECIFIC OBJECTIVES OF THIS PLAN ARE TO:

1. MINIMIZE THE POTENTIAL FOR A FRAC-OUT ASSOCIATED WITH DIRECTIONAL DRILLING ACTIVITIES;
2. PROVIDE FOR THE TIMELY DETECTION OF FRAC-OUTS;
3. PROTECT THE ENVIRONMENTALLY SENSITIVE RIVERBED AND ASSOCIATED RIPARIAN VEGETATION;
4. ENSURE THE ORGANIZED, TIMELY, AND "MINIMUM-IMPACT" RESPONSE IN THE EVENT OF A FRAC-OUT AND RELEASE OF DRILLING BENTONITE; AND
5. ENSURE THAT ALL APPROPRIATE NOTIFICATIONS ARE MADE IMMEDIATELY TO THE SUPERVISORY SITE ENGINEER.

### 2.0 DESCRIPTION OF WORK

IN THE EVENT OF A DROP IN THE DRILLING PRESSURE AND DRILLING FLUID VOLUME VARIATIONS OR OTHER EVIDENCE OF A FRAC-OUT DURING OPERATIONS WILL BE HALTED BY THE DRILL RIG OPERATORS IMMEDIATELY. THE CLEAN-UP OF ALL SPILLS SHALL BEGIN IMMEDIATELY. MANAGEMENT AND SAFETY DEPARTMENT SHALL BE NOTIFIED IMMEDIATELY OF ANY SPILLS AND SHALL BE CONSULTED REGARDING CLEAN-UP PROCEDURES. A VACUUM TRUCK AND CONTAINMENT MATERIALS, SUCH AS STRAW BALES, SHALL ALSO BE ON-SITE PRIOR TO AND DURING ALL OPERATIONS. THE SITE SUPERVISOR WILL BE IMMEDIATELY NOTIFIED. IN THE EVENT OF A FRAC-OUT, THE ON-SITE FOREMAN/SUPERVISOR WILL CONDUCT AN EVALUATION OF THE SITUATION AND DIRECT RECOMMENDED MITIGATION ACTIONS BASED ON THE FOLLOWING GUIDELINES:

- a. IF THE FRAC-OUT IS MINOR, EASILY CONTAINED, HAS NOT REACHED THE SURFACE AND IS NOT THREATENING SENSITIVE RESOURCES, DRILLING OPERATION MAY RESUME AFTER USE OF A LEAK STOPPING COMPOUND (DIAMOND SEAL OR EQUAL) OR REDIRECTION OF THE BORE.
- b. IF THE FRAC-OUT HAS REACHED THE SURFACE, ANY MATERIAL CONTAMINATED WITH BENTONITE SHALL BE REMOVED BY A VACUUM TRUCK AND PROPERLY DISPOSED OF, AS REQUIRED BY LAW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE BENTONITE IS EITHER PROPERLY DISPOSED OF AT AN APPROVED DISPOSAL FACILITY OR PROPERLY RECYCLED IN AN APPROVED MANNER.

### 3.0 SITE SUPERVISOR / FOREMAN RESPONSIBILITIES

THE SITE SUPERVISOR/FOREMAN IS FAMILIAR WITH ALL ASPECTS OF THE DRILLING ACTIVITY, THE CONTENTS OF THIS FRAC-OUT CONTINGENCY PLAN AND THE CONDITIONS OF APPROVAL UNDER WHICH THE ACTIVITY IS PERMITTED TO TAKE PLACE. THE SITE SUPERVISOR/FOREMAN HAS THE AUTHORITY TO STOP WORK AND COMMIT THE RESOURCES (PERSONNEL AND EQUIPMENT) NECESSARY TO IMPLEMENT THIS PLAN.

### 4.0 EQUIPMENT

THE SITE SUPERVISOR/FOREMAN WILL ENSURE THAT:

- a. ALL EQUIPMENT AND VEHICLES WILL BE MAINTAINED DAILY TO PREVENT LEAKS OF HAZARDOUS MATERIALS;
- b. SPILL KITS AND SPILL CONTAINMENT MATERIALS WILL BE AVAILABLE ON-SITE AT ALL TIMES AND THAT THE EQUIPMENT IS IN GOOD WORKING ORDER; AND
- c. EQUIPMENT REQUIRED TO CONTAIN AND CLEAN-UP A FRAC-OUT RELEASE WILL EITHER BE AVAILABLE AT THE WORK SITE OR READILY AVAILABLE AT AN OFF-SITE LOCATION WITHIN 15 MINUTES OF THE BORE SITE.

### 5.0 DRILLING PROCEDURES

THE FOLLOWING PROCEDURES SHALL BE FOLLOWED EACH DAY PRIOR TO THE START OF WORK. THE FRAC-OUT CONTINGENCY PLAN SHALL BE AVAILABLE ON-SITE DURING ALL CONSTRUCTION. THE SITE SUPERVISOR/FOREMAN SHALL BE ON-SITE AT ANY TIME THAT DRILLING IS OCCURRING OR IS PLANNED TO OCCUR. THE SITE SUPERVISOR/FOREMAN SHALL ENSURE THAT A JOB BRIEFING MEETING IS HELD AT THE START OF EACH DAY OF DRILLING TO REVIEW THE APPROPRIATE PROCEDURES TO BE FOLLOWED IN CASE OF A FRAC-OUT. QUESTIONS SHALL BE ANSWERED AND CLARIFICATION GIVEN ON ANY POINT OVER WHICH THE DRILLING CREW OR OTHER PROJECT STAFF HAS CONCERNS.

EXIT AND ENTRY PITS SHALL BE ENCLOSED BY SILT FENCES AND STRAW. A VACUUM TRUCK SHALL BE READILY AVAILABLE ON-SITE PRIOR TO AND DURING ALL DRILLING OPERATIONS. CONTAINMENT MATERIALS (STRAW, SILT FENCING, SAND BAGS, FRAC-OUT SPILL KITS, ETC.) SHALL BE STAGED ON-SITE AT LOCATION WHERE THEY ARE READILY AVAILABLE AND EASILY MOBILIZED FOR IMMEDIATE USE IN THE EVENT OF AN ACCIDENTAL RELEASE OF DRILLING MUD (FRAC-OUT). IF NECESSARY, BARRIERS (STRAW BALES OR SEDIMENTATION FENCES) BETWEEN THE BORE SITE AND THE EDGE OF THE WATER

SOURCE SHALL BE CONSTRUCTED PRIOR TO THE DRILLING TO PREVENT RELEASED BENTONITE MATERIAL FROM REACHING THE WATER.

ONCE THE DRILL RIG IS IN PLACE AND DRILLING BEGINS, THE DRILL OPERATOR SHALL STOP WORK WHENEVER THE PRESSURE IN THE DRILL RIG DROPS OR THERE IS A LACK OF RETURNS IN THE ENTRANCE PIT. AT THIS TIME, THE SITE SUPERVISOR/FOREMAN SHALL BE INFORMED OF THE POTENTIAL FRAC-OUT. THE SITE SUPERVISOR/FOREMAN AND THE DRILL RIG OPERATOR(S) SHALL WORK TO COORDINATE THE LIKELY LOCATION OF THE FRAC-OUT. THE LOCATION OF THE FRAC-OUT SHALL BE RECORDED AND NOTES MADE ON THE LOCATION AND MEASURES TAKEN TO ADDRESS THE CONCERN. THE FOLLOWING SUBSECTIONS SHALL BE ADHERED TO WHEN ADDRESSING A FRAC-OUT SITUATION.

WATER CONTAINING MUD, SILT, BENTONITE, OR OTHER POLLUTANTS FROM EQUIPMENT WASHING OR OTHER ACTIVITIES SHALL NOT BE ALLOWED TO ENTER A LAKE, FLOWING STREAM OR OTHER WATER SOURCE. THE BENTONITE USED IN THE DRILLING PROCESS SHALL BE EITHER DISPOSED OF AT AN APPROVED DISPOSAL FACILITY OR RECYCLED IN AN APPROVED MANNER. OTHER CONSTRUCTION MATERIALS AND WASTES SHALL BE RECYCLED OR DISPOSED OF AS APPROPRIATE.

### 5.1 VAC-TRUCK

A VACUUM TRUCK SHALL BE STAGED AT A LOCATION FROM WHICH IT CAN BE MOBILIZED AND RELOCATED SO THAT ANY PLACE ALONG THE DRILL SHOT CAN BE REACHED BY THE APPARATUS WITHIN 10 MINUTES OF A FRAC-OUT.

### 5.2 FIELD RESPONSE TO FRAC-OUT OCCURRENCE

THE RESPONSE OF THE FIELD CREW TO A FRAC-OUT RELEASE SHALL BE IMMEDIATE AND IN ACCORDANCE WITH PROCEDURES IDENTIFIED IN THIS PLAN. ALL APPROPRIATE EMERGENCY ACTIONS THAT DO NOT POSE ADDITIONAL THREATS TO SENSITIVE RESOURCES WILL BE TAKEN AS FOLLOWS:

- a. DIRECTIONAL BORING WILL STOP IMMEDIATELY.
- b. THE BORE STEM WILL BE PULLED BACK TO RELIEVE PRESSURE ON THE FRAC-OUT.
- c. THE SITE SUPERVISOR/FOREMAN WILL BE NOTIFIED TO ENSURE THAT MANAGEMENT AND THE SAFETY DEPARTMENT IS NOTIFIED, ADEQUATE RESPONSE ACTIONS ARE TAKEN AND NOTIFICATIONS MADE.
- d. THE SITE SUPERVISOR/FOREMAN SHALL EVALUATE THE SITUATION AND RECOMMEND THE TYPE AND LEVEL OF RESPONSE WARRANTED INCLUDING THE LEVEL OF NOTIFICATION REQUIRED.
- e. IF THE FRAC-OUT IS MINOR, EASILY CONTAINED, HAS NOT REACHED THE SURFACE AND IS NOT THREATENING SENSITIVE RESOURCES, A LEAK STOPPING COMPOUND SHALL BE USED TO BLOCK THE FRAC-OUT. IF THE USE OF LEAK STOPPING COMPOUND IS NOT FULLY SUCCESSFUL, THE BORE STEM SHALL BE REDIRECTED TO A NEW LOCATION ALONG THE DESIRED DRILL PATH WHERE THE FRAC-OUT HAS NOT OCCURRED.
- f. IF THE FRAC-OUT HAS REACHED THE SURFACE, ANY MATERIAL CONTAMINATED WITH BENTONITE SHALL BE CONTAINED. A DIKE OR BERM MAY BE CONSTRUCTED AROUND THE FRAC-OUT TO ENTRAP RELEASED DRILLING FLUID IF NECESSARY. CLEAN SAND SHALL BE PLACED AND THE AREA RETURNED TO PRE-PROJECT CONDITIONS.
- g. IF A FRAC-OUT OCCURS, REACHES THE SURFACE AND BECOMES WIDESPREAD, THE SITE SUPERVISOR/FOREMAN SHALL AUTHORIZE A READILY ACCESSIBLE VACUUM TRUCK AND BULLDOZER STORED OFF-SITE TO BE MOBILIZED. THE VACUUM TRUCK MAY BE POSITIONED AT EITHER END OF THE LINE OF THE DRILL SO THAT THE FRAC-OUT CAN BE REACHED BY CREWS ON FOOT OR MAY BE PULLED BY A BULLDOZER SO THAT CONTAMINATED SOILS CAN BE VACUUMED UP.

### 5.3 RESPONSE CLOSE-OUT PROCEDURES

WHEN THE RELEASE HAS BEEN CONTAINED AND CLEANED UP, RESPONSE CLOSE-OUT ACTIVITIES WILL BE CONDUCTED AT THE DIRECTION OF THE SITE SUPERVISOR/FOREMAN AND SHALL INCLUDE THE FOLLOWING:

- a. THE RECOVERED DRILLING FLUID WILL EITHER BE RECYCLED OR HAULED TO AN APPROVED FACILITY FOR DISPOSAL. NO RECOVERED DRILLING FLUIDS WILL BE DISCHARGED INTO STREAMS, STORM DRAINS OR ANY OTHER WATER SOURCE.
- b. ALL FRAC-OUT EXCAVATION AND CLEAN-UP SITES WILL BE RETURNED TO PRE-PROJECT CONTOURS USING CLEAN FILL AS NECESSARY; AND
- c. ALL CONTAINMENT MEASURES (FIBER ROLLS, STRAW BALES, ETC.) WILL BE REMOVED UNLESS OTHERWISE SPECIFIED BY THE SITE SUPERVISOR/FOREMAN.

### 5.4 CONSTRUCTION RE-START

FOR SMALL RELEASES NOT REQUIRING EXTERNAL NOTIFICATION, DRILLING MAY CONTINUE IF 100 PERCENT CONTAINMENT IS ACHIEVED THROUGH THE USE OF A LEAK STOPPING COMPOUND OR REDIRECTION OF THE BORE AND THE CLEAN-UP CREW REMAINS AT THE FRAC-OUT LOCATION THROUGHOUT THE CONSTRUCTION PERIOD.

### 5.5 BORE ABANDONMENT

ABANDONMENT OF THE BORE WILL ONLY BE REQUIRED WHEN ALL EFFORTS TO CONTROL THE FRAC-OUT WITHIN THE EXISTING DIRECTIONAL BORE HAVE FAILED.

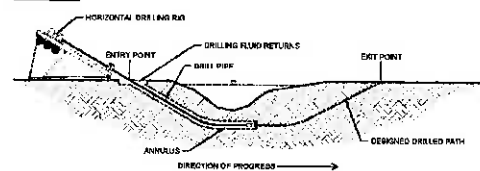
### 5.6 NOTIFICATION

IN THE EVENT OF A FRAC-OUT, THE SITE SUPERVISOR MUST NOTIFY THE SITE INSPECTION ENGINEER AND THE GENERAL CONTRACTOR SUPERVISOR/FOREMAN.

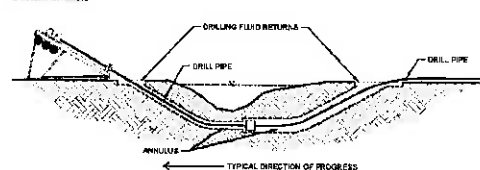
### 6.0 PROJECT COMPLETION AND CLEAN-UP

- a. ALL MATERIALS AND ANY RUBBISH-CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION ZONE AT THE END OF EACH WORK DAY.
- b. SUMP PITS AT BORE ENTRY AND EXITS WILL BE FILLED AND RETURNED TO NATURAL GRADE.

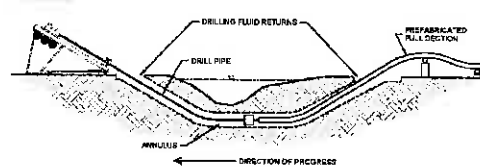
### PILOT HOLE



### PREREAMING



### PULLBACK



### 8 DIRECTIONAL BORE DETAIL SCALE: N.T.S.

### HORIZONTAL DIRECTIONAL DRILLING NOTES

1. CONTRACTOR SHALL BE FAMILIAR WITH THE WORK AREA AND THE REQUIREMENTS OF THE DRILLING PATH.
2. CONTRACTOR SHALL MONITOR AND RECORD THE PIPE ALIGNMENT AND DEPTH READINGS ALONG THE DRILL PATH.
3. CONTRACTOR SHALL MAINTAIN DRILLING FLUID CIRCULATION THROUGHOUT THE DIRECTIONAL DRILLING PROCESS. ALSO SHALL MONITOR FLUID PRESSURE AND LENGTH OF BORE FOR ANY "FRAC-OUTS" OF DRILLING FLUID. CONTRACTOR SHALL SUBMIT "FRAC-OUT" PLAN FOR REVIEW PRIOR TO PROCEEDING.
4. CONTRACTOR SHALL PLAN THEIR REAMING AND PULLBACK OPERATIONS TO ENSURE THAT, ONCE STARTED THEY CAN BE COMPLETED WITHOUT STOPPING AND WITHIN THE WORK HOURS.
5. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT OIL AND DRILLING FLUID SPILLS USING ENVIRONMENTALLY FRIENDLY MATS AND OTHER ACCEPTABLE METHODS. EXCESS DRILLING FLUID SHALL BE CONFINED IN A CONTAINMENT PIT UNTIL RECYCLED OR REMOVED FROM THE SITE.
6. CONTRACTOR TO ENSURE THAT ACCEPTABLE NOISE LEVELS ARE NOT EXCEEDED DURING THE DRILLING AND PULLBACK OPERATIONS.
7. CONTRACTOR TO USE BMPs TO INSURE SAFETY AND PROTECTION ON THE JOB SITE. REFER TO HORIZONTAL DIRECTIONAL DRILLING PROCEDURES DEVELOPED BY THE NASTT HOD CONSORTIUM, 2004, 2001 FOR FURTHER DETAILS.
8. CONTRACTOR TO ENSURE THAT TENSILE LOADS EXERTED ON PIPING DO NOT EXCEED SAFE LEVELS SPECIFIED BY THE DESIGN ENGINEER.
9. SENDING AND RECEIVING PITS SHALL BE LOCATED IN UNPAVED AREAS, UNLESS BOUNDARY RESTRAINTS DEEM OTHERWISE.
10. ALL OTHER UTILITIES RUNNING PARALLEL (OR PERPENDICULAR) TO THE DIRECTIONAL DRILLING MUST BE LOCATED VISIBLY PRIOR TO THE START OF THE DRILLING.
11. CONSTRUCTION DRAWINGS, SHOWING THE PROPOSED METHOD AND PROCEDURE OF TRENCHLESS INSTALLATION, CONSTRUCTION OF ENTRANCE AND EXIT PITS, AND SCHEDULE OF ACTIVITIES REQUIRE TO PERFORM ALL TRENCHLESS INSTALLATIONS INDICATED IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE WORK ON THE TRENCHLESS INSTALLATION OPERATIONS IS STARTED. THE CONTRACT SHALL REFERENCE NTS/SDOT STANDARD SPECIFICATIONS SECTION 650: TRENCHLESS INSTALLATION OF CASING (IF REQUIRED).
12. PER THE REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF UNDERGROUND UTILITY INSTALLATIONS WITHIN THE STATE HIGHWAY RIGHT-OF-WAY CASING PIPE (IF REQUIRED) SHALL MEET THE FOLLOWING SPECIFICATIONS REQUIREMENTS: STEEL PIPE: ASTM 139, GRADE 8 (OR EQUAL), 35,000 PSI MIN. YIELD STRENGTH.
13. APPROVAL OF CONSTRUCTION DRAWINGS SHALL NOT RELIEVE THE CONTRACTORS RESPONSIBILITY TO PERFORM THE WORK WITHOUT DAMAGE TO EXISTING FACILITIES.

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**PROJECT ROUTE DESIGN PLANS FOR**  
**Central Hudson**  
8-M LINE GAS  
REINFORCEMENT PROJECT  
TOWN OF CARMEL  
PUTNAM COUNTY, NY

**ALBANY OFFICE**  
1000 N. STATE ST.  
ALBANY, NY 12207  
Phone: 518-483-3323  
Fax: 518-483-3384

AS SHOWN	DATE	BY	DATE	BY	DATE	BY
15000244	04/09/17	04/09/17	04/09/17	04/09/17	04/09/17	04/09/17

**HDD DETAILS & NOTES**

34 of 34



Site Planning  
Civil Engineering  
Landscape Architecture  
Land Surveying  
Transportation Engineering

Environmental Studies  
Entitlements  
Construction Services  
3D Visualization  
Laser Scanning

September 14, 2017

Chairman Harold Gary and Members of the Planning Board  
Town of Carmel Planning Board  
60 McAlpin Avenue  
Mahopac, New York 10541

RE: JMC Project 17155  
Easter Seals New York  
97 Old Route 6  
Town of Carmel, NY

Dear Chairman Gary and Members of the Board:

On behalf of Easter Seals New York c/o Fedcap Rehabilitation Services, Inc, we are pleased to submit the following documents in support of their application for Amended Site Plan Approval for the addition of an outdoor play area and parking modifications:

1. Town of Carmel Site Plan Application (11 copies)
2. SEQR Environmental Assessment Form (11 copies)
3. JMC Drawings (5 copies):

<u>Dwg. No.</u>	<u>Title</u>	<u>Rev. #/Date</u>
C-010	"Layout Plan"	09/13/2017
C-020	"Grading, Utilities and Erosion Control Plan"	09/13/2017
C-900	"Construction Details"	09/13/2017
C-910	"Construction Details"	09/13/2017

4. CD containing the electronic files of the submission
5. Disclosure Statement (2 copies)
6. Site Plan Completeness Certification Form (11 copies)
7. Property Deed (2 copies)
8. Easements covenants and restrictions (2 copies)
9. Fed Rehabilitation Services Inc. check number 2362 in the amount of \$3,000.00 for the fee for an Amendment to a Previous Approved Site Plan

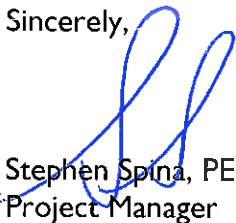
JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC | JMC Site Development Consultants, LLC

The project involves reoccupying a vacant portion of the existing building with a day-care center for Easter Seals of New York. There are proposed internal renovations to the building to change it from its previous use which was an adult learning center for disabled adults to a day-care center for small children with disabilities. As part of the requirements for a day-care center, the project proposes the construction of an outdoor play area to be surrounded by fencing. The area will be lawn and asphalt surface. The location of the proposed outdoor play area has been indicated by the property owner and will be within the existing lawn area in the rear of the property. Due to the topography, an accessible ramp with hand rails is proposed to provide access from the existing parking area to the play area. A striped pedestrian safe access route is proposed from the outdoor play area to the rear of the building. A striped designated drop-off/pick-up area for a bus and a sign are shown behind the building.

The current property differs from the Site Plan approved by the Planning Board in 1998 in that there is an additional parking area. The enclosed plans also show the current surveyed conditions. Minor modifications are required to the existing striping to demonstrate the parking meets the zoning requirements for aisle widths.

We trust the enclosed and above are sufficient for your review and look forward to our discussion at the meeting on September 27th. If you have any questions or require any additional information, please contact our office. Thank you for your consideration.

Sincerely,



Stephen Spina, PE  
Project Manager

cc: Chief of Carmel Fire Department, w/enc.  
Mr. Pat Cleary, AICP, PP  
Ms. Marianne Gribbon  
Mr. Jay Feiertag  
Darius Chafizadeh, Esq.  
Mr. Kevin Dwyer

*Easter Seals New York*



**TOWN OF CARMEL**  
**SITE PLAN APPLICATION**  
**INSTRUCTIONS**



The Town of Carmel Planning Board meetings are held twice a month, on the second and fourth Wednesday's, at 7:00 PM at Carmel Town Hall, 60 McAlpin Avenue, Carmel

The submission deadline is 10 days prior to the Planning Board meeting. New site plan applications that have been deemed complete will be placed on the agenda in the order they are received.

**No application will be placed on the agenda that is incomplete**

**Pre-Submission:**

Prior to the formal submission of the site plan, a pre-submission conference may be requested by the applicant to be conducted with representatives from the Town, which may include the Town Planner, Town Engineer, Director of Code Enforcement and/or the Planning Board Attorney. This conference will serve to educate the applicant on the process he/she must follow, clarify the information required to submit a complete site plan application, and to highlight any specific areas of concern. You may arrange a pre-submission conference through the Planning Board Secretary at (845) 628-1500 extension 190.

**Submission Requirements:**

At least 10 days prior to the Planning Board meeting, the site plan application shall be submitted to the Planning Board Secretary as follows:

All site plans shall be signed, sealed and folded with the title box legible. The application package shall include:

- ☒ 11 copies of the Site Plan Application Form, signed and notarized.
- ☒ 11 copies of the SEQR Environmental Assessment Form (use of short form or long form shall be determined at pre-submission conference).
- ☒ 5 full size sets of the Site Plan (including floor plans and elevations)
- ☒ 1 CD (in pdf. format) containing an electronic version of the Site Plan
- ☒ 2 copies of the Disclosure Statement
- ☐ 11 copies of the Site Plan Completeness Certification Form
- ☒ All supplemental studies, reports, plans and renderings.
- ☐ 2 copies of the current deed.
- ☒ 2 copies of all easements, covenants and restrictions.
- ☒ The appropriate fee, determined from the attached fee schedule. Make checks payable to the *Town of Carmel*.

*Rose Lombardi 9/19/17*  
Planning Board Secretary; Date

*[Signature] 9/19/17*  
Town Engineer; Date





# TOWN OF CARMEL

## SITE PLAN APPLICATION



Per Town of Carmel Code – Section 156 - Zoning

SITE IDENTIFICATION INFORMATION		
Application Name: Easter Seals New York		Application # 17-0012
Date Submitted: 09/14/2017		
Site Address: No. 97 Street: Old Route 6 Hamlet: Carmel		
Property Location: (Identify landmarks, distance from intersections, etc.) Approximately 130 Feet Northwest of Old Route 6's intersection with Route 6		
Town of Carmel Tax Map Designation: Section 55.11 Block 1 Lot(s) 23, 24, 25 & 27		Zoning Designation of Site: Commercial
Property Deed Recorded in County Clerk's Office Date 2/27/02 Liber 1579 Page 203		Liens, Mortgages or other Encumbrances Yes No <input checked="" type="checkbox"/> X
Existing Easements Relating to the Site No Yes <input checked="" type="checkbox"/> X Describe and attach copies: Temporary grading easements that have been terminated.		Are Easements Proposed? No Yes <input checked="" type="checkbox"/> X Describe and attach copies: Easement to allow Tenant Access to Neighboring Site where Playground will be located.
Have Property Owners within a 500' Radius of the Site Been Identified? Yes <input checked="" type="checkbox"/> X No Attached List to this Application Form		
APPLICANT/OWNER INFORMATION		
Property Owner: Durkin Water Realty, LLC		Phone #: 914 447-0049 Email: Fax#:
Owners Address: No. 120 Street: Fields Lane Town: Brewster State: NY Zip: 10509		
Applicant (If different than owner): Easter Seals New York c/o Fedap Rehab Services		Phone #: Email: Fax#: mgribbon@eastersealsny.org
Applicant Address (If different than owner): No. 633 Street: Third Avenue, 6th Floor Town: New York State: NY Zip: 10017		
Individual/ Firm Responsible for Preparing Site Plan: Darius P. Chafizadeh, Esq. Harris Beach, PLLC		Phone #: 914 683-1200 Email: Fax#: 914 683-1210 dchafizadeh@harrisbeach.com
Address: No. 445 Street: Hamilton Ave, Ste. 1206 Town: White Plains State: NY Zip: 10601		
Other Representatives: JMC, PLLC		Phone #: 914 273 5225 Email: Fax#: 914 273 2102 sspina@jmcpllc.com
Owners Address: No. 120 Street: Bedford Road Town: Armonk State: NY Zip: 10504		
PROJECT DESCRIPTION		
Describe the project, proposed use and operation thereof: Interior renovation of suites 7 and 8 on Lot 25, as well as the construction of an exterior children's play area on Lot 27. Modifications to existing striping on Lots 24 and 25 to conform to Town requirements. Striped cross walk and pick-up/drop-off area on Lot 25.		

# TOWN OF CARMEL SITE PLAN APPLICATION



PROJECT INFORMATION			
<b>Lot size:</b> Acres: 5.55      Square Feet: 241,557		<b>Square footage of all existing structures (by floor):</b> 20,900 gross floor area	
<b># of existing parking spaces:</b> 89		<b># of proposed parking spaces:</b> 82	
<b># of existing dwelling units:</b> N/A		<b># of proposed dwelling units:</b> N/A	
<b>Is the site served by the following public utility infrastructure:</b> *82 spaces to remain			
• Is project in sewer district or will private septic system(s) be installed? <u>Sewer District</u>			
• If yes to Sanitary Sewer answer the following:			
*Existing sewer connection to remain. No new contributing flows. ✓			
▶ Does approval exist to connect to sewer main? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> <u>NA</u>			
▶ Is this an in-district connection? _____ Out-of district connection? _____			
▶ What is the total sewer capacity at time of application? _____			
▶ What is your anticipated average and maximum daily flow _____			
<b>For Town of Carmel Town Engineer</b>			
▶ What is the sewer capacity _____			
• Water Supply      Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>			
*Existing water connection to remain. No new demand added. ✓			
If Yes: ▶ Does approval exist to connect to water main? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> <u>NA</u>			
▶ What is the total water capacity at time of application? _____			
▶ What is your anticipated average and maximum daily demand _____			
• Storm Sewer      Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>			
• Electric Service      Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>			
• Gas Service      Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>			
• Telephone/Cable Lines      Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>			
<b>For Town of Carmel Town Engineer</b>			
Water Flows <u>not applicable</u> } <u>RSF</u> Sewer Flows <u>1.5</u> } <u>9/19/17</u>			
<b>Town Engineer, Date</b>			
What is the predominant soil type(s) on the site? <u>HSG C (HSG B in play area)</u>		What is the approximate depth to water table? 2 feet or greater	
<b>Site slope categories:</b>		15-25% <u>5.5 %</u> 25-35% <u>6.6 %</u> >35% <u>7.5 %</u>	
<b>Estimated quantity of excavation:</b>		Cut (C.Y.) <u>20</u> Fill (C.Y.) <u>20</u>	
<b>Is Blasting Proposed</b> Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> Unknown: <input type="checkbox"/>		<b>Is the site located in a designated Critical Environmental Area?</b> Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
<b>Does a curb cut exist on the site?</b> Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>		<b>Are new curb cuts proposed?</b> Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
<b>What is the sight distance?</b> Left _____ Right _____ <u>N/A</u>		<b>Is the site located within 500' of:</b>	
• The boundary of an adjoining city, town or village		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• The boundary of a state or county park, recreation area or road right-of-way		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• A county drainage channel line.		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
• The boundary of state or county owned land on which a building is located		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	



## TOWN OF CARMEL SITE PLAN APPLICATION

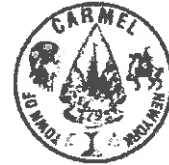
Is the site listed on the State or Federal Register of Historic Place (or substantially contiguous) Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>			
Is the site located in a designated floodplain? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>			
Will the project require coverage under the Current NYSDEC Stormwater Regulations <div style="text-align: right;">Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/></div>			
Will the project require coverage under the Current NYCDEP Stormwater Regulations <div style="text-align: right;">Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/></div>			
Does the site disturb more than 5,000 sq ft		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Does the site disturb more than 1 acre		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Does the site contain freshwater wetlands? Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>			
Jurisdiction: NYSDEC: <input type="checkbox"/> Town of Carmel: <input type="checkbox"/>			
<i>If present, the wetlands must be delineated in the field by a Wetland Professional, and survey located on the Site Plan.</i>			
Are encroachments in regulated wetlands or wetland buffers proposed?		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Does this application require a referral to the Environmental Conservation Board?		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Does the site contain waterbodies, streams or watercourses?		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Are any encroachments, crossings or alterations proposed?		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Is the site located adjacent to New York City watershed lands?		Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	
Is the project funded, partially or in total, by grants or loans from a public source?		Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
Will municipal or private solid waste disposal be utilized? Public: <input type="checkbox"/> Private: <input checked="" type="checkbox"/>			
Has this application been referred to the Fire Department?		Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	
Submitted concurrently to Town of Carmel Fire Department			
What is the estimated time of construction for the project? ±1 - 2 months			
ZONING COMPLIANCE INFORMATION			
Zoning Provision	Required	Existing	Proposed
Lot Area	40,000	241,557	241,557
Lot Coverage	30%	9	9
Lot Width	200	1163	1163
Lot Depth	200	352	352
Front Yard	40	56	56
Side Yard	25	55	55
Rear Yard	30	52	52
Minimum Required Floor Area	5,000	20,900	20,900
Floor Area Ratio	N/A	--	--
Height	35	<35	<35
Off-Street Parking	43	89	82
Off-Street Loading	2	2	2

## TOWN OF CARMEL SITE PLAN APPLICATION

Will variances be required? Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	If yes, identify variances: 50 foot setback from outdoor play space to rear lot line and 15 foot landscape buffer from outdoor play area to rear lot line.
<b>PROPOSED BUILDING MATERIALS</b>	
Foundation <span style="float: right;">N/A</span>	
Structural System	
Roof	
Exterior Walls	
<b>APPLICANTS ACKNOWLEDGEMENT</b>	
I hereby depose and certify that all the above statements and information, and all statements and information contained in the supporting documents and drawings attached hereto are true and correct.	
<u>Marianne Gibson</u> Applicants Name	<u></u> Applicants Signature
Sworn before me this <u>14<sup>th</sup></u> day of <u>Thursday</u> 20 <u>17</u>	
<u></u> Notary Public	<b>MICHELE STEWART</b> Notary Public - State of New York No. 01ST6324893 Qualified in Bronx County My Commission Expires May 18, 20 <u>19</u>



TOWN OF CARMEL  
**SITE PLAN COMPLETENESS  
CERTIFICATION FORM**



All Site Plans submitted to the Planning Board for review shall include the following information and details, as set forth in Section 156-61 B of the Town of Carmel Zoning Ordinance.

This form shall be included with the site plan submission

	Requirement Data	To Be Completed by the Applicant	Waived by the Town
1	Name and title of person preparing the site plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Name of the applicant and owner (if different from applicant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Original drawing date, revision dates, scale and north arrow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Tax map, block and lot number(s), zoning district	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	All existing property lines, name of owner of each property within a 500' radius of the site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Contour lines at two-foot intervals, grades of all roads, driveways, sanitary and storm sewers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	The location of all water bodies, streams, watercourses, wetland areas, wooded areas, rights-of-way, streets, roads, highways, railroads, buildings, structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	The location of all existing and proposed easements	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	The location of all existing and proposed structures, their use, setback dimensions, floor plans, front, side and rear elevations, buildable area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	On site circulation systems, access, egress ways and service roads, emergency service access and traffic mitigation measures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Sidewalks, paths and other means of pedestrian circulation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	On-site parking and loading spaces and travel aisles with dimensions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	The location, height and type of exterior lighting fixtures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Proposed signage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15	For non-residential uses, an estimate of the number of employees who will be using the site, description of the operation, types of products sold, types of machinery and equipment used	<input checked="" type="checkbox"/>	<input type="checkbox"/>



# TOWN OF CARMEL SITE PLAN COMPLETENESS CERTIFICATION FORM



16	The location of clubhouses, swimming pools, open spaces, parks or other recreational areas, and identification of who is responsible for maintenance.	<input checked="" type="checkbox"/>	
17	The location and design of buffer areas, screening or other landscaping, including grading and water management. A comprehensive landscaping plan in accordance with the Tree Conservation Law	N/A <input checked="" type="checkbox"/>	
18	The location of public and private utilities, maintenance responsibilities, trash and garbage areas	<input checked="" type="checkbox"/>	
19	A list, certified by the Town Assessor, of all property owners within 500 feet of the site boundary	<input checked="" type="checkbox"/>	
20	Any other information required by the Planning Board which is reasonably necessary to ascertain compliance with this chapter	<input checked="" type="checkbox"/>	

**Applicants Certification** (to be completed by the licensed professional preparing the site plan:

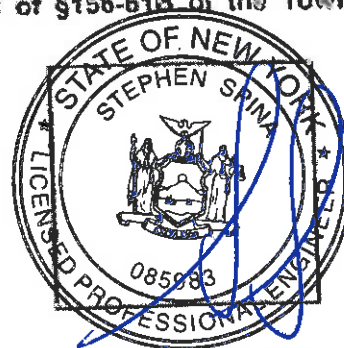
I, Stephen Spina hereby certify that the site plan to which I have attached my seal and signature, meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

Signature - Applicant

9/14/17  
Date

Raymond C. DiStasio  
Signature - Owner

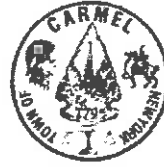
9-13-17  
Date



Professional Seal



TOWN OF CARMEL  
SITE PLAN COMPLETENESS  
CERTIFICATION FORM



Town Certification (to be completed by the Town)

I \_\_\_\_\_ hereby confirm that the site plan meets all of the requirements of §156-61B of the Town of Carmel Zoning Ordinance:

Rose Grunlytte  
Signature - Planning Board Secretary

9/19/17  
Date

[Signature]  
Signature - Town Engineer

9/19/17  
Date

617.20  
Appendix B  
Short Environmental Assessment Form


**Instructions for Completing**

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b>							
<b>Easter Seals New York</b>							
Name of Action or Project: Pre-K Center for special needs students.							
Project Location (describe, and attach a location map): 97 Old Route 6, Suites 7 & 8 Carmel, New York 10512							
Brief Description of Proposed Action: Easter Seals is proposing to open a center to accommodate 20 children (with 10 teachers/staff members) at 97 Old Route 6 (Suites 7 & 8) in the Town of Carmel (Tax Lot 55.11-1-25). Easter Seals is proposing to buildout the interior space and install an outdoor play space for the students.							
Name of Applicant or Sponsor: Easter Seals of New York c/o Fedap Rehabilitation Services Inc.		Telephone: E-Mail: mgribbon@eastersealsny.org					
Address: 633 Third Avenue, 6th Floor							
City/PO: New York		State: New York	Zip Code: 10017-6787				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">NO</td> <td style="width: 50%; text-align: center;">YES</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> </tr> </table>	NO	YES	X	
NO	YES						
X							
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Site Plan Approval from the Town of Carmel Planning Board			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">NO</td> <td style="width: 50%; text-align: center;">YES</td> </tr> <tr> <td></td> <td style="text-align: center;">X</td> </tr> </table>	NO	YES		X
NO	YES						
	X						
3.a. Total acreage of the site of the proposed action?		5.55 acres					
b. Total acreage to be physically disturbed?		0.11 acres					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		0 acres					
4. Check all land uses that occur on, adjoining and near the proposed action.							
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland							

Page 2 of 4

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size:	NO	YES
	X	
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	NO	YES
	X	
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	NO	YES
	X	
<b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b> Applicant/sponsor name: <u>Easter Seals New York, Marianne Gribbon</u> Date: <u>09/14/2017</u> Signature: 		

**Part 2 - Impact Assessment.** The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2. Will the proposed action result in a change in the use or intensity of use of land?		
3. Will the proposed action impair the character or quality of the existing community?		
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7. Will the proposed action impact existing:		
a. public / private water supplies?		
b. public / private wastewater treatment utilities?		
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?		
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?		



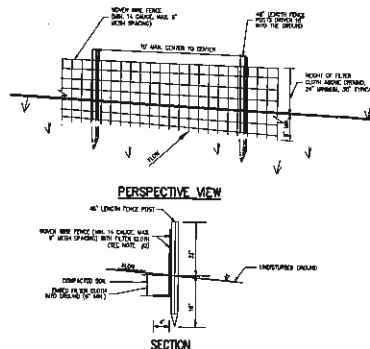
	No. or small impact may occur	Moderate to large impact may occur
10 Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?		
11 Will the proposed action create a hazard to environmental resources or human health?		

**Part 3 - Determination of significance.** The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

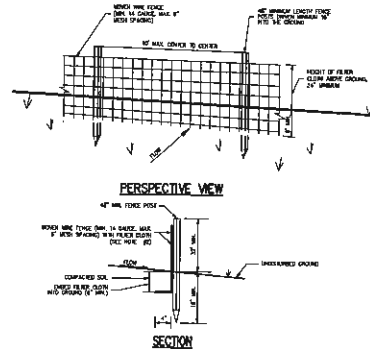
<input type="checkbox"/> Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.	
<input type="checkbox"/> Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.	
Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)



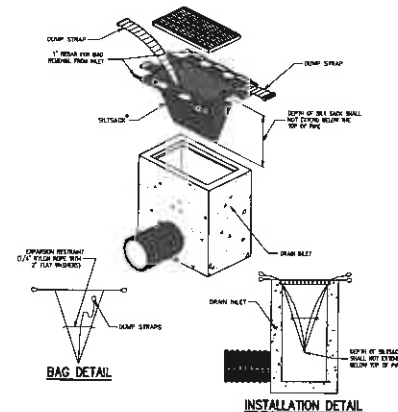
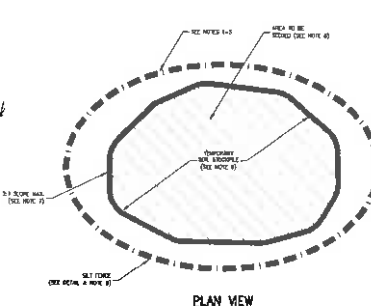




- NOTES**
1. WHEN SILT FENCE SHALL BE INSTALLED TO FENCE PLOTS WITH MORE THAN ONE ROW OF STAKES, PLOTS SHALL BE 100' OR LESS IN LENGTH.
  2. FILTER CLOTH SHALL BE FASTENED TO STAKES WITH WIRE STAPLES EVERY 4' AT TOP AND BOTTOM. FENCE SHALL BE BUILT WITH 1/2\"/>



- NOTES**
1. WHEN SILT FENCE SHALL BE FASTENED TO STAKES WITH WIRE STAPLES, STAPLES SHALL BE 10\"/>



**IN-PILE SILT SACK AS MANUFACTURED BY  
"AT" ENVIRONMENTAL IN AUSTIN, TEXAS**

FOR USE AS A SUBSTITUTE TO HEAVY PRESTRESSING AND RUN-OUTS

PROPERTIES	TEST METHOD	UNITS
1. TENSILE STRENGTH	ASTM D-4833	200 LBS
2. TENSILE ELONGATION	ASTM D-4833	200 LBS
3. TENSILE ELONGATION	ASTM D-4833	200 LBS
4. TENSILE ELONGATION	ASTM D-4833	200 LBS
5. TENSILE ELONGATION	ASTM D-4833	200 LBS
6. TENSILE ELONGATION	ASTM D-4833	200 LBS
7. TENSILE ELONGATION	ASTM D-4833	200 LBS
8. TENSILE ELONGATION	ASTM D-4833	200 LBS
9. TENSILE ELONGATION	ASTM D-4833	200 LBS
10. TENSILE ELONGATION	ASTM D-4833	200 LBS

## SILT FENCE

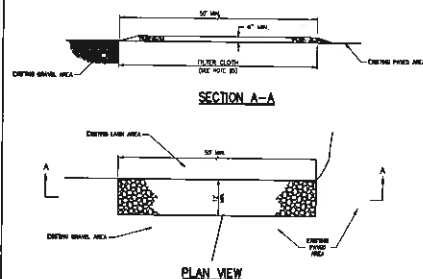
1

## TEMPORARY SOIL STOCKPILE WITH SILT FENCE

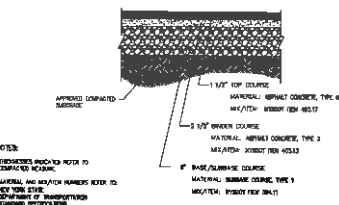
2

## SILT SACK

3



- NOTES**
1. ENTRANCE SHALL BE 10' TO 12' WIDE, OR WIDER, AS REQUIRED BY RETICULATED CONCRETE EQUIPMENT.
  2. ENTRANCE SHALL BE REINFORCED, BUT NOT LESS THAN 12\"/>

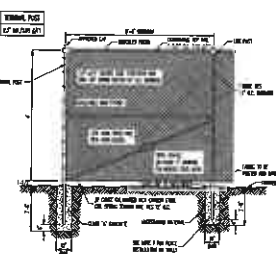


- NOTES**
1. MATERIAL AND METHOD OF CONSTRUCTION SHALL BE AS SPECIFIED IN THE SPECIFICATIONS.
  2. MATERIAL AND METHOD OF CONSTRUCTION SHALL BE AS SPECIFIED IN THE SPECIFICATIONS.

## SITE PAVEMENT

(Light Duty)

5



- NOTES**
1. ALL POSTS, RAILS, AND ACCESSORIES SHALL BE GALVANIZED STEEL. COLOR OF PAINT SHALL BE BLACK.
  2. POSTS AND RAILS SHALL BE FABRICATED FROM GALVANIZED STEEL. GALVANIZED STEEL SHALL BE FABRICATED AND GALVANIZED IN ACCORDANCE WITH ASTM A-654. ALL GALVANIZED STEEL SHALL BE GALVANIZED AND GALVANIZED IN ACCORDANCE WITH ASTM A-654.

## CHAIN LINK FENCE

(W/OUT COATING)

7

## STEEL PIPE RAILING FOR ADA RAMP

8

## STABILIZED CONSTRUCTION ENTRANCE

4

## PEDESTRIAN CROSSING

6

## CONSTRUCTION DETAILS

EASTER SEALS NEW YORK  
97 OLD ROUTE 9  
TOWN OF CANNON, NY 10841

ANY ALTERATION OF PLANS  
SPECIFICATIONS, PLANS AND  
REPORTS BEARING THE SEAL  
OF A REGISTERED PROFESSIONAL  
ENGINEER OR ARCHITECT SHALL  
BE SUBJECT TO A VIOLATION OF  
SECTION 1-1.1 OF THE  
NEW YORK STATE EDUCATION  
LAW, EXCEPT AS PROVIDED FOR IN  
SECTION 1-1.1.1 OF THE  
NEW YORK STATE EDUCATION  
LAW.

DATE: 01/10/2017  
TIME: 10:00 AM  
PROJECT: 12345  
SHEET: 1 OF 1

C-900

C-910



A GREENBERG DESIGN GROUP

TWO MUSCOOT ROAD NORTH  
MAHOPAC, NY 10541  
P 845-628-6613  
F 845-628-2807 e-mail: joel.greenberg@arch-visions.com

September 19, 2017

Harold Gary, Chairman and Members of the Planning Board  
Town of Carmel  
60 Mcalpin Avenue  
Mahopac, New York 10541

Re; Wixon Pond Estates  
Wixon Pond Road  
T.M. # 53.20-1-19

Dear Mr. Gary and Members of the Board,

On behalf of my client, I respectfully request a six month extension of our preliminary approval. After many years, the project has finally been approved by the NYC-DEP. Our next step is to get Putnam County Health Department approval.

Thanking you in advance for your interest and cooperation in this matter. If you have any questions, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read "Joel Greenberg", is written over the typed name. The signature is fluid and cursive, with a large loop at the end.

Joel Greenberg, AIA

## Trombetta,Rose

---

**From:** Zef Smajlaj <zef510park@aol.com>  
**Sent:** Thursday, September 14, 2017 1:23 PM  
**To:** Trombetta,Rose  
**Subject:** Re: My email

Hi Rose

It was nice talking to you today.

I need to extend my building permit, I understand that I have to attend a meeting on the 27th of September, Please let me know by when I need to drop my check of for a \$1000.00.

Kind regards.

Zef Smajlaj.

Zef Smajlaj  
510 Park Avenue  
212-355-1490 p  
212-355-2867 f

-----Original Message-----

From: Trombetta,Rose <[rtrombetta@ci.carmel.ny.us](mailto:rtrombetta@ci.carmel.ny.us)>  
To: zef510Park <[zef510Park@aol.com](mailto:zef510Park@aol.com)>  
Sent: Thu, Sep 14, 2017 12:11 pm  
Subject: My email

*Rose Trombetta*

**Planning Office  
Carmel Town Hall  
60 McAlpin Ave  
Mahopac, NY 10541  
845-628-1500 Ext. 190**



September 13, 2017

Town of Carmel Planning Board  
60 McAlpin Avenue  
Mahopac, New York 10541

RE: PCSB Amended Site Plan  
Route 6  
Tax Map No. 86.11-1-1 – Lot 1

Dear Chairman Gary and Members of the Board:

Enclosed please find four copies of the construction as-built survey entitled "*Survey of Property Prepared for Putnam County Savings Bank.*" last revised May 15, 2017. By way of this letter we respectfully request this item be placed on the September 27, 2017 Planning Board agenda for recommendation of a bond return. It is our understanding the Engineering Department has already reviewed the as-built survey and found it to be acceptable.

If you should have any questions or comments, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:



Jeffrey J. Contelmo, PE  
Senior Principal Engineer

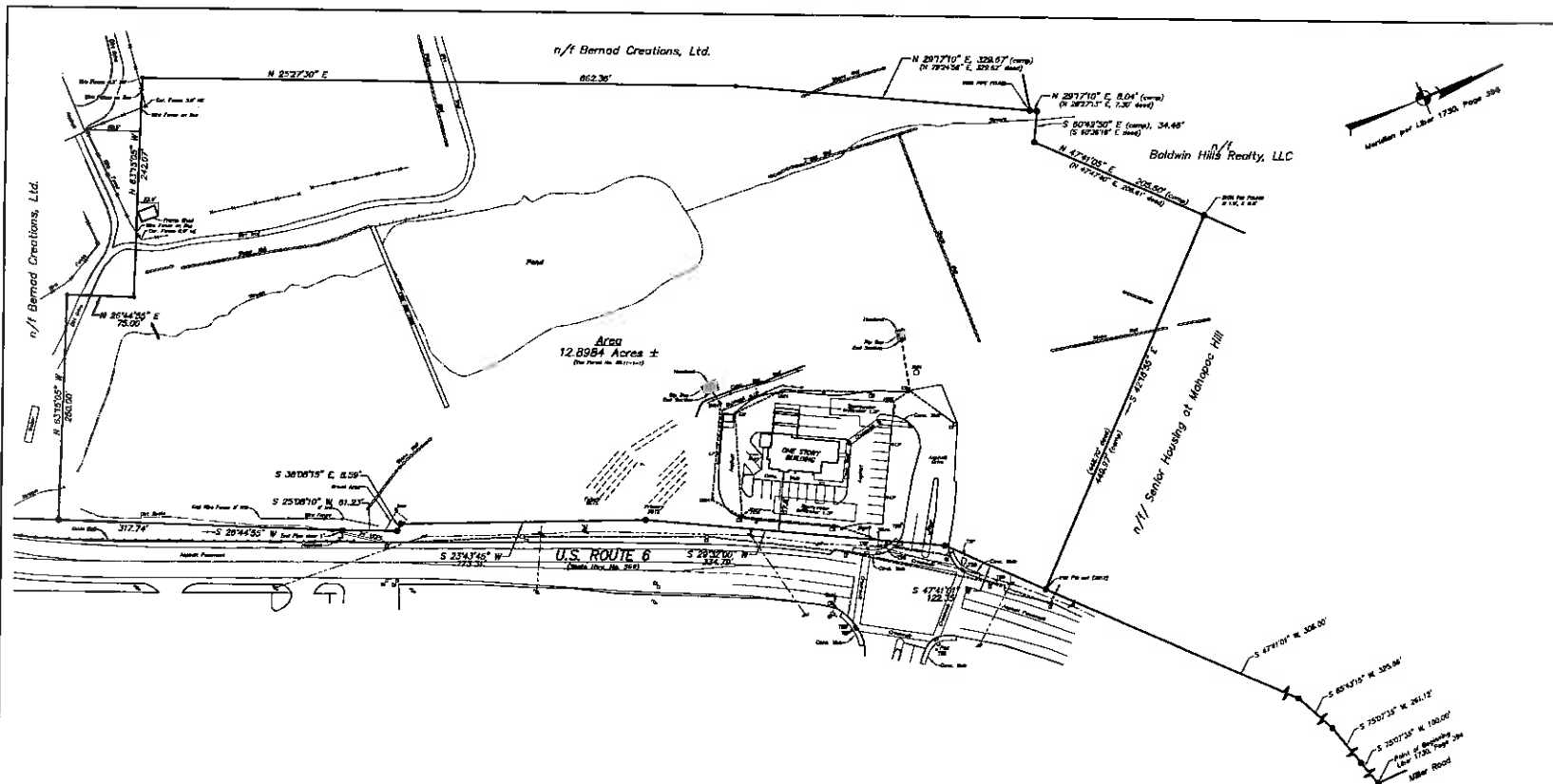
JJC/dlm

Enclosures

cc: Robert Farrier, w/enclosures

Insite File No. 15130.100





FIELDWORK COMPLETED: MAY 8, 2015  
 FIELDWORK BROUGHT TO DATE: MAY 14, 2017

MAP PREPARED: JUNE 8, 2015  
 MAP REVISED: MAY 15, 2017

This survey is subject to the findings of a current Title Report.  
 To date, no Title Report or Abstract of Title has been provided.

Platemarks detail an adjoining property as shown herein  
 for reference only.

Underground structures, if any exist, not shown herein,  
 except as noted, the location of underground improvements  
 or encroachments are not shown known and often must be  
 determined. If any, underground improvements or encroachments  
 are not covered by this certificate.

This map may not be used in connection with a "Survey  
 Affidavit" or similar document, statement or endorsement  
 to obtain title insurance for any subsequent or future  
 process.

Unauthorized alteration or addition to this survey is a  
 violation of Section 7205, Subdivision 2 of the New York  
 State Education Law.

According to NYSALS policy adopted January 25, 1993,  
 the alteration of survey maps by anyone other than the  
 original engineer is misleading, unethical and not in the  
 general welfare and benefit of the public. Licensed Land  
 Surveyors shall not alter survey maps, survey plans, or  
 survey plats prepared by others.

DEED REFERENCES:  
 Liber 1733, Page 234; recorded January 4, 2006  
 Grantee: Baldwin Hills Realty, LLC

MAP REFERENCES:  
 250th Place-Mohawk County Highway 268, Map No. 63  
 (Reconstruction), dated September 15, 1950, as provided  
 by the New York State Department of Transportation.

Property corner monuments are not placed or part of this  
 survey.

Certifications indicated herein signify that this survey was  
 prepared in accordance with the existing Code of Practice  
 for Land Surveyors adopted by the New York State Association  
 of Professional Land Surveyors, Inc. Such certifications shall  
 not only be the basis for whom this survey was prepared  
 and on his behalf to the title company, governmental agency  
 and/or lending institution listed herein, and to the customer  
 of the lending institution.

Certifications are not transferable to additional lending  
 institutions or subsequent owners.

Only copies from the original of this survey marked with the  
 surveyor's embossed seal are genuine, true and correct copies  
 of the surveyor's original work and opinion. A copy of this  
 document without a proper signature of the surveyor's  
 embossed seal should be considered to be an unauthenticated copy.

LEGEND	
-----	Stone Wall
-----	Wire Fence
-----	Concrete Curb
-----	Catch Basin
-----	Drain Inlet
-----	Hydrodynamic Separator
-----	Sanitary Manhole
-----	Utility Pole (with natural wood)
-----	Lights
-----	Electric Box
-----	Traffic Signal Pole
-----	Traffic Signal Box

NICHOLAS G. CHAPPEL, L.S.  
 New York State License No. 049330

**INSITE**  
 ENGINEERING, SURVEYING &  
 LANDSCAPE ARCHITECTURE, P.C.  
 3 Cortland Plaza • Cortland, New York 13812  
 Phone (845) 258-0800 • Fax (845) 220-0717  
 www.insite-ny.com

© 2017 Insite Engineering, Surveying & Landscape Architecture, P.C. All Rights Reserved.

Survey of Property  
 Prepared for  
**PUTNAM COUNTY  
 SAVINGS BANK**  
 Situate in the  
 Town of Carmel  
 Putnam County, New York

Scale 1" = 60'

ESB30.100  
 2/28/17/17



September 13, 2017

Town of Carmel Planning Board  
60 McAlpin Avenue  
Mahopac, New York 10541

RE: Gateway Summit Senior Housing Lot 6  
Gateway Drive  
Tax Map No. 55.-2-24.6-1 & 55.-2-24.6-2

Dear Chairman Gary and Members of the Board:

As the Board is aware, approval for the subject project was regranted effective February 8, 2017, which will expire on February 8, 2018. Since that time, there has been no substantial change in the condition of the site and/or its environs. The applicant requests a 1 year extension of the Site Plan approval. Please place this item on the Board's upcoming September 27<sup>th</sup>, 2017 agenda for consideration of an extension of approval.


A check is enclosed for the \$1,000.00 application fee.

Should you have any questions or comments regarding this information, please feel free to contact our office.

Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:



Jeffrey J. Contelmo, PE  
Senior Principal Engineer

JJC/dlm

Enclosure

cc: Fred Koelsch, CRI

Insite File No. 04232.106



September 13, 2017

Town of Carmel Planning Board  
60 McAlpin Avenue  
Mahopac, New York 10541

RE: The Fairways Senior Housing Lot 7  
Gateway Drive  
Tax Map No. 55.-2-24.8-1 & 55.-2-24.8-2

Dear Chairman Gary and Members of the Board:

As the Board is aware, approval for the subject project was regranted effective February 8, 2017, which will expire on February 8, 2018. Since that time, there has been no substantial change in the condition of the site and/or its environs. The applicant requests a 1 year extension of the Site Plan approval. Please place this item on the Board's upcoming September 27<sup>th</sup>, 2017 agenda for consideration of an extension of approval.

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Very truly yours,

INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

By:

  
Jeffrey J. Contelmo, PE  
Senior Principal Engineer

JJC/dlm

Enclosure

cc: Fred Koelsch, CRI

Insite File No. 05140.100

**KENNETH SCHMITT**  
*Town Supervisor*

**FRANK D. LOMBARDI**  
*Town Councilman*  
*Deputy Supervisor*

**JOHN D. LUPINACCI**  
*Town Councilman*  
**SUZANNE MC DONOUGH**  
*Town Councilwoman*  
**JONATHAN SCHNEIDER**  
*Town Councilman*

**TOWN OF CARMEL**  
**TOWN HALL**



**60 McAlpin Avenue**  
**Mahopac, New York 10541**  
**Tel. (845) 628-1500 • Fax (845) 628-6836**  
**[www.carmelny.org](http://www.carmelny.org)**

**ANN SPOFFORD**  
*Town Clerk*

**KATHLEEN KRAUS**  
*Receiver of Taxes*

**MICHAEL SIMONE**  
*Superintendent of Highways*  
*Tel. (845) 628-7474*

## **MEMORANDUM**

**To:** **Harold Gary, Chairman**  
**Town of Carmel Planning Board**

**Date:** **August 17, 2017**

**From:** **Supervisor Kenneth Schmitt** 

**RE:** **Town Board Voting Meeting, November 19, 2014**

---

The Town Board at their Work Session held on Wednesday, August 16, 2017, made a motion to forward to the Planning Board the attached Proposed Ordinance Regarding Wireless Telecommunications.

Please have the Planning Board review the attached draft and provide any comments or recommendations to the Town Board within 45 days of receipt of this memo.

Thank you in advance for your cooperation.

**Cc:** **Town Board**  
**Town Legal Counsel**  
**file**

**TOWN OF CARMEL**  
**WIRELESS TELECOMMUNICATIONS ORDINANCE**

**§ I. Legislative intent.**

1. The Telecommunications Act of 1996 preserved, with certain limitations, local government land use and zoning authority concerning the placement, construction, and modification of wireless telecommunications facilities. The purpose of this Wireless Telecommunications Ordinance is to provide the Town of Carmel with the authority to properly regulate necessary utility infrastructure for the provision of wireless telecommunications facilities within the Town,
2. The Town Board finds that the regulation of wireless telecommunications facilities is necessary to protect the predominantly suburban and rural residential character of the Town and the property values of the community; such regulation is needed to protect schools, parks, churches, playgrounds and historic structures; to preserve scenic areas; important commercial corridors; to minimize aesthetic impacts; to preserve the health and safety of residents; and to respect the need of wireless telecommunications service providers to relay signals without electronic interference from other service providers' operations, while not unreasonably limiting competition among them.
3. The Town Board declares that the protection of residential areas of the Town is of paramount importance and that any local regulations of wireless telecommunications facilities must furnish all possible protection for residential areas, and further declares that the provisions of this article are to be interpreted to favor protection of residential areas. The Planning Board shall, before issuing a special exception use permit for a wireless telecommunications facility in a residentially zoned area, satisfy itself that all other alternatives have been exhausted.
4. The Town Board finds that the aesthetic appearance of wireless telecommunication facilities is a paramount concern, particularly along the Town's important commercial corridors.
5. In general, shared use and collocation of antennas and antenna- mounting structures are preferred to the construction of new facilities.

**§ II. Definitions.**

As used in this article, the following terms shall have the meanings indicated:

**ADMINISTRATIVE APPROVAL** — Zoning approval that the Director of Code Enforcement or designee is authorized to grant after administrative review.

ADMINISTRATIVE REVIEW — Nondiscretionary evaluation of an application by the Director of Code Enforcement or designee. The process is not subject to a public hearing. The procedures for administrative review are established in § of this chapter.

ANSI — The American National Standards Institute.

ANTENNA — A system of electrical conductors for radiating or receiving radio waves.

ANTENNA, WIRELESS TELECOMMUNICATIONS — Any device, including the supporting structure and all related appurtenances, used for the transmission and reception of radio waves as part of wireless two-way communications.

#### BASE STATION

1. A structure or equipment at a fixed location that enables FCC-licensed or authorized wireless communications between user equipment and a communications network. The term does not encompass a tower as defined herein or any equipment associated with a tower. "Base station" includes, without limitation:
  1. Equipment associated with wireless communications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.
  2. Radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration.
  3. Any structure other than a tower that, at the time the relevant application is filed with the Town under this section, supports or houses equipment defined as a "wireless telecommunications facility" that has been reviewed and approved under the applicable zoning or siting process, or under another state or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing that support.
2. The term does not include any structure that, at the time the relevant application is filed with the Town under this article, does not support or house equipment defined as a "wireless telecommunications facility."

COLLOCATION — The mounting or installation of a subsequent wireless telecommunications antennas and related transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

ELIGIBLE FACILITY REQUEST OR ELIGIBLE FACILITIES REQUEST — Any request for a wireless communications facility that does not involve substantial change to the physical conditions of a tower, base station or building involving:

1. Collocation of new transmission equipment in a high priority area as defined in § IX; or
2. Removal of transmission equipment; or
3. Replacement of transmission equipment.

ELIGIBLE SUPPORT STRUCTURE — Any tower or base station as defined in this section, provided that it is existing at the time the relevant application is filed with Building Department under this article.

**EXISTING FACILITY** — A constructed tower or base station is existing for purposes of this article if it has been reviewed and approved under the applicable zoning or siting process, or under another state or local regulatory review process, provided that a tower that has not been reviewed because it was not in a zoned area when it was built, but was lawfully constructed, is existing for purposes of this article.

**FCC** — The Federal Communications Commission.

**FREQUENCY** — The number of sinusoidal cycles made by electromagnetic radiation in one second; usually expressed in units of hertz (Hz).

**NIER (NONIONIZING ELECTROMAGNETIC RADIATION)** — Electromagnetic radiation of such frequency that the energy of the radiation does not dissociate electrons from their constituent atoms when an atom absorbs the electromagnetic radiation.

**RF** — Radio frequency.

**SUBSTANTIAL CHANGE** — A modification substantially changes the physical dimensions of an eligible support structure if it meets any of the following criteria:

1. The mounting of the proposed antenna on existing towers, other than towers in the public rights-of-way, would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed 20 feet, whichever is greater; for other eligible support structures, it increases the height of the structure by more than 10% or more than 10 feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this subsection if necessary to avoid interference with existing antennas;
2. The mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter;
3. The mounting of the proposed antenna would involve adding an appurtenance to the body of existing towers, other than towers in the public rights-of-way, that would protrude from the edge of the towers more than 20 feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for other eligible support structures, it involves adding an appurtenance to the body of the structure that would protrude from the edge of the structure by more than six feet, except that the mounting of the proposed antenna may exceed the size limits set forth in this subsection if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable;
4. The mounting of the proposed antenna would involve excavation outside the current existing structure site, defined as the current boundaries of the leased or owned property surrounding the existing structure and any access or utility easements currently related to the site;
5. The modification defeats concealment and/or stealth elements of the support structure; or
6. The modification does not comply with prior conditions of the approval for the existing structure site; provided, however, that this limitation does not apply to any modification

that is noncompliant only in a manner that would not exceed the thresholds identified above.

**STEALTH TECHNOLOGY**- a cellular telecommunications facility that is designed to blend into the surrounding environment. Examples of stealth facilities include:

1. Architecturally screened roof-mounted antennas;
2. Building-mounted antennas painted to match the existing structure;
3. Antennas integrated into architectural elements; and
4. Antenna structures designed to look like light poles, trees, clock towers, bell steeples, or flag poles.

**TOWER** — Any structure built for the sole or primary purpose of supporting any FCC- licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services, including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

**TRANSMISSION EQUIPMENT** — Equipment that facilitates transmission for any FCC- licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supplies. The term includes equipment associated with wireless communications services, including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

**WIRELESS TELECOMMUNICATION FACILITIES** — Any facility for the receiving or transmitting of wireless signals for commercial purposes, such as cellular telephone services, personal communication services (PCS), specialized mobile radio (SMR), enhanced mobile radio (ESMR), paging, satellite digital audio radio service (SDARS), fleet communication systems and similar commercial facilities, whether operated in support of another business activity or available for the transmission of signals on a sale or rental basis. As used herein the term shall include any necessary support structure, connection cables and equipment buildings as well as towers or monopoles.

### **§ III. Special exception use permit; policies and goals.**

In order to assure that the placement, construction and modification of wireless telecommunications facilities conforms to the Town of Carmel's purpose and intent of this article, such facilities shall require the approval of a special permit. Consideration of a wireless telecommunications facility special permit shall address the following goals:

1. Establish an application procedure for person(s) seeking a special permit for a wireless telecommunications facility.
2. Establish a policy for examining an application for and issuing a special permit for a wireless telecommunications facility that is both fair and consistent.



3. Establish reasonable time frames for granting or not granting a special exception use permit for a wireless telecommunications facility.
4. Promote and encouraging, wherever possible, the sharing and/or collocation of a wireless telecommunications facility among service providers.
5. Promote and encouraging, wherever possible, the placement of a wireless telecommunications facility in such a manner as to cause minimal disruption to the land, property, buildings and other facilities adjacent to, surrounding and in generally the same area as the requested location of such facility.
6. Minimize any adverse aesthetic impacts to the community through the proper siting, location, screening, buffering or through the application of effective and innovative design measures and stealth technology.

#### **§ IV. Eligible Facilities Request; administrative approval.**

1. The Town has determined that the full special permit review procedure is unnecessary for certain wireless communications facilities that do not involve a substantial change to the physical characteristics of an existing tower, base station or building involving:
  4. Collocation of new transmission equipment in a high priority area as defined in § IX; or
  5. Removal of transmission equipment; or
  1. Replacement of transmission equipment.
2. Type of review. Upon receipt of an application for an Eligible Facilities Request, the Director of Code Enforcement or designee shall review such application to determine whether the application so qualifies as an Eligible Facility Request as defined in this chapter. If determined to be an Eligible Facility Request, such application shall undergo an administrative review, as defined herein. If it is determined that there will be a substantial change to an existing facility, this section shall not apply.
3. Application. An application form provided by the Building Department shall be provided which shall establish the information necessary for the Town to consider whether an application is an Eligible Facilities Request. Each application shall include the following:
  - (1) An application form provided by the Building Department.
  - (2) A radio frequency safety report demonstrating compliance with FCC safety standards.
  - (3) Certification that the installation will comply with visual standards set forth in § XIV.
  - (4) The payment of a fee for an eligible facilities request, as stated in the Town of Carmel Schedule of User Fees.

4. Timeframe for review. Within 60 days after an Eligible Facilities Request has been received, the Director of Code Enforcement or his designee shall approve the application unless it has been determined that the application creates a substantial change or otherwise does not meet the criteria of an Eligible Facilities Request. Once an Eligible Facilities Request application has been approved, the Director of Code Enforcement shall issue a building permit.
4. Tolling of time frame for review.
  - (1) The sixty-day review period begins to run when the application is filed, and may be tolled by mutual agreement by the Director of Code Enforcement and the applicant.
  - (2) The time frame for review may also be tolled when the Director of Code Enforcement or his designee determines that the application is incomplete. When an application has been determined to be incomplete, the following process shall be used to toll the time frame for review:
    - (a) The Director of Code Enforcement or designee shall provide written notice to the applicant within 30 days of receipt of the application, specifically delineating all missing documents or information required in the application or such other reasons why the application has been determined to be incomplete.
    - (b) Within 10 days of a supplemental submission, the Director of Code Enforcement or designee will notify the applicant if his or her application has been deemed complete. If application is still found to be incomplete after a supplemental submission, the applicant must provide additional supplemental submissions until the application has been deemed complete.
    - (c) The time frame for review will not begin to run again until the application has been deemed complete.
5. Failure to act. In the event the Director of Code Enforcement or designee fails to approve or deny a request seeking approval under this section within the time frame for review, accounting for any tolling, the application shall be approved. However, such approval does not become effective until the applicant notifies the Director of Code Enforcement in writing after the review period has expired, accounting for any tolling, that the application has been approved.
6. Interaction with §n (c)(7). If it is determined that the applicant's request is not covered by § 6409(a)<sup>1</sup> as delineated under this section, the presumptively reasonable time frame under § (c)(7),<sup>2</sup> as prescribed by the FCC's Shot Clock order, will begin to run from the issuance of the decision that the application is not a covered request. To the extent such

information is necessary, the Town may request additional information from the applicant to evaluate the application under § 332(c)(7), pursuant to the limitations applicable to other § (c)(7) reviews.

1. **Editor's Note: See 47 U.S.C. § 1455(a).**
2. **Editor's Note: See 47 U.S.C. § 332(c)(7).**

#### **§ V. Procedure for special permit application; fee.**

1. All applicants for a special permit for a wireless telecommunications facility or any modification of such facility and renewal thereof shall comply with the requirements set forth in this section.
2. The applicant shall be required to provide sufficient funds to an escrow account to allow the Planning Board to retain such technical experts as may be necessary to review the proposal, provided that no funds shall be deposited until a scope of work is agreed upon among the applicant, the expert and the Planning Board. In any event, the initial deposit shall be a minimum of \$3,500. A larger deposit may be required if, in the judgment of the Planning Board, the complexity and scope of the proposal requires additional expert review. The applicant shall maintain the escrow account at the amount of the initial deposit and replenish same in a timely manner. Payment in full thereto shall be a condition precedent to any approval by the Planning Board. Any unused funds will be returned to the applicant upon completion of the review. The withdrawal of an application shall not relieve the applicant of the payment obligations of this section.
3. The Planning Board is hereby authorized to issue a special permit under the provisions of this article subject to all of the special requirements and conditions herein and any requirements which may be made a part hereof. Every special permit shall also conform to all special findings that are specified herein.
4. Application to the Planning Board for a special permit under this article shall be accompanied by a fee in accordance with the current Town fee schedule.
5. Prior to or concurrent with the filing of a formal application to the Planning Board to obtain a special permit under this article, the applicant shall submit information needed to meet the requirements of the New York State Environmental Quality Review Act (SEQR). The Planning Board may hold a joint public hearing under the provisions of SEQR and this article whenever practicable. In the event that a final SEQR determination has not been made, no application for a special permit under this article shall be granted. The time periods in which the Planning Board may take action may be extended with the consent of the applicant.
6. The owner of the subject property shall be joined as a co-applicant.
7. In addition to any other applicable notice requirements established elsewhere in the Town Code, the applicant shall cause notice of the public hearing by notifying all property owners by certified mail, return receipt requested, within 500 feet of the boundary line of the subject property.

**8. The applicant is required to provide a physical mockup of the proposed project**

**§ VI. Information required for wireless telecommunications antennas.**

A. For all proposed wireless telecommunications antennas the following information shall be provided:

1. Name and address of the property owner and the applicant.
2. Address, lot and block and/or parcel number of the property.
3. Zoning district in which the property is situated.
4. Name and address of the person preparing the plan.
5. Size of the property and the location of all lot lines.
6. Approximate location of nearest residential structure.
7. Approximate location of nearest occupied structure.
8. Location of all structures on the property which is the subject of the application.
9. Location, size and height of all proposed and existing antennas and all appurtenant structures on the property.
10. Type, size and location of all proposed landscaping.
11. A report by a New York State licensed professional engineer documenting compliance with applicable structural standards and describing the general structural capacity of any proposed installation.
12. The number and type of antennas proposed.
13. A description of the proposed antennas and all related fixtures, structures, appurtenances and apparatus, including height above grade, materials, color and lighting.
14. A description of the antenna's function and purpose.
15. The make, model and manufacturer of the antenna.
16. The frequency, modulation and class of service.
17. Transmission and maximum effective radiated power.
18. Direction of maximum lobes and associated radiation and compliance with FCC regulations.
19. Consent to allow additional antennas (for purposes of collocating) on any new antenna towers, if feasible.
20. If a collocation, the cumulative impacts, visual and otherwise, of the proposed antenna.

B. The items in Subsection A(12) through (18) shall be included in a report prepared by a radio frequency engineer, health physicist or other qualified professional.

**§ VII. Facility service plan.**

All proposals to provide or operate wireless telecommunications facilities shall be accompanied by a facility service plan, which shall include all the information necessary to allow the Planning Board to understand the existing, proposed and long-range plans of the applicant. The facility service plan shall include at least the following information:

1. The location, height and operational characteristics of all existing facilities of the applicant in and immediately adjacent to the Town.

2. A two-to-five-year plan for the provision of additional facilities in and immediately adjacent to the Town, indicating whether each proposed facility is for initial coverage or capacity-building purposes and showing proposed general locations or areas in which additional facilities are expected to be needed. Subsequent applications will confirm or modify the facility service plan so that the Planning Board may be kept up-to-date on future activities.
3. A commitment to collocate or allow collocation wherever possible on all existing and proposed facilities.

#### **§ VIII. Requirements applicable to all wireless telecommunications antennas.**

For all proposed wireless telecommunications antennas the following requirements are applicable:

1. For proposed sites within 100 feet of other sources of RF energy, emanating from other wireless telecommunications facilities, the applicant shall provide an estimate of the maximum total exposure from all nearby stationary sources and a comparison with relevant standards. This assessment shall include individual and ambient levels of exposure. It shall not include such residentially based facilities such as cordless telephones.
2. All obsolete or unused wireless telecommunications antennas (including tower supports) shall be removed within 60 days of cessation of operations at the site. The Town may remove such facilities upon reasonable notice and an opportunity to be heard and treat the cost as a tax lien on the property. The Planning Board may also require at the time of approval, the posting of a bond sufficient to cover the costs of removing an abandoned wireless telecommunications facility.
3. All antennas shall be identified with signs not to exceed six square feet, listing the owner's or operator's name and emergency telephone number, and shall be posted in a conspicuous place.
4. New antennas may not be sited within 500 feet of any existing antenna. This restriction does not apply to the siting of new antennas at an existing site.
5. No source of NIER, including facilities operational before the effective date of this article, shall exceed the federal or state NIER emission standard.
6. New antennas and supporting towers shall be designed to accommodate additional antennas for purposes of collocating.

#### **§ IX. Location of wireless telecommunications facilities.**

1. Applicants for wireless telecommunications facilities shall locate, site and erect said wireless telecommunications facilities, including towers and other tall structures, in

accordance with the following priorities, one being the highest priority and six being the lowest priority:

- a. On existing tall structures or wireless telecommunications towers in nonresidential zoning districts.
  - b. Collocation on a site with existing wireless telecommunications towers or structures in nonresidential districts, not fronting on NYS Routes 6, 6N, 52 and 301.
  - c. Collocation on a site with existing wireless telecommunications towers or structures in any other nonresidential districts.
  - d. Installation of a new wireless telecommunications facility in any nonresidential district.
  - e. Installation of a new wireless telecommunications facility in any residential district.
  - f. On other property in the Town.
2. If the proposed site for a wireless telecommunications facility is not the highest priority listed above, then a detailed explanation must be provided as to why a site of higher priority was not selected. The applicant must satisfactorily demonstrate the reason or reasons why such a permit should be granted for the proposed site and the hardship that would be incurred by the applicant if the permit were not granted for the proposed site.
3. An applicant may not bypass a site of higher priority by stating that the site presented is the only site selected or secured. An applicant shall address collocation as an option, and, if such option is not proposed, the applicant shall explain why collocation is impracticable. Agreements between providers limiting or prohibiting collocation shall not be considered a valid basis for a claim of impracticability. Notwithstanding the above, the Planning Board may approve any site located within an area in the above list of priorities, provided that the Planning Board finds that the proposed site is in the best interests of the health, safety and welfare of the Town of Carmel and its inhabitants.
4. The applicant shall submit a report demonstrating the applicant's review of the above priorities demonstrating the technical reasons for the site selection and, if the site selected is not the highest priority, a detailed explanation of why sites of higher priority were not selected.
5. Notwithstanding that a potential site may be situated in an area of highest priority or highest available priority, the Planning Board may disapprove an application for any of the following reasons:
  - (a) Conflict with safety and safety-related codes and regulations.

- (b) Conflict with traffic needs or traffic laws, or definitive plans for changes in traffic flow or traffic laws.
- (c) Conflict with the historic nature of a neighborhood.
- (d) The use of a wireless telecommunications facility which is contrary to an already stated purpose of a specific zoning or land use designation.
- (e) The placement and location of a wireless telecommunications facility which would create an unacceptable risk, or the probability of such, to residents, the public, employees and agents of the Village or employees of the service provider or other service providers.
- (f) Conflicts with the provisions of this article.

**§ X. Antenna locations where public exposure is likely.**

For roof-mounted, collocated or other situations in which public exposure is likely, the application shall include:

1. An assessment of potential public exposure to radio frequency (RF) energy from the proposed facility indicating the facility's compliance with applicable federal or state standards. The applicant shall identify the maximum exposure level, the locations at which this occurs and the estimated RF levels at specific locations of community interest, such as schools, residences or commercial buildings. Assumptions used in the calculations shall be stated, including building heights and topography.
2. A multiple-source exposure impact assessment shall be prepared if the wireless telecommunications facility is to be situated on the same site as existing facilities, such as a tower or roof.
3. Evidence that the maximum exposure to the general public will not exceed federal or state standards.
4. An identification of rooftop areas to which the public may have access. The exposure in these areas shall be in compliance with the standards established by any federal or state agencies.
5. An identification of how much of the roof, if any, should be designated a "controlled environment" due to RF field levels in accordance with the applicable federal or state standard.
6. Notification of the building management if any portion of the roof needs to be identified as a "controlled environment" due to RF levels in excess of the guidelines in the applicable federal or state standards.

## **§ XI. Roof-mounted antennas.**

Requirements applicable to roof-mounted antennas are as follows:

1. Antennas shall not be placed more than 15 feet higher than the height limitation for buildings and structures within the zoning district in which the antenna is proposed to be erected.
2. Antennas may be set back from the outer edge of the roof a distance equal to or greater than 10% of the rooftop length and width, or such antennas may be attached directly to the roof parapet wall, whichever, in the Planning Board's opinion, will have the minimal visual impact while achieving signal coverage requirements.
3. If the Planning Board requests, antennas shall be the same color of the exterior of the top floor or parapet of the building except to the extent required by law.

## **§ XII. New wireless telecommunications towers.**

1. The applicant shall demonstrate to the satisfaction of the Planning Board that there exists no tower on which the antenna may collocate or that collocation is not feasible for any of the following reasons:
  - (a) The applicant has been unable to come to a reasonable agreement to collocate on another tower. The names, addresses, phone and fax numbers of other service providers approached shall be provided, accompanied by a written statement as to the reason an agreement could not be reached.
  - (b) The antenna will not unreasonably interfere with the view of or from any park, designated scenic area, historic district, site or structure.
  - (c) The radio, television, telephone or reception of similar signals for nearby properties will not be disturbed or diminished.
  - (d) The applicant's network of antenna locations is not adequate to properly serve its customers, and the use of facilities of other entities is not suitable for physical reasons.
  - (e) Adequate and reliable service cannot be provided from existing sites in a financially and technologically feasible manner consistent with the service providers' system requirements.
  - (f) Existing sites cannot accommodate the proposed antenna due to structural or other engineering limitations (e.g., frequency incompatibilities).



- (g) For proposed monopole or tower facilities, there is a report by a New York State licensed professional engineer specializing in structural engineering certifying that the proposed design is structurally sound.
- b. Any application for the approval of a special permit for a wireless telecommunications facility shall include a report by a qualified radio frequency engineer, health physicist or other qualified professional, as determined by the Planning Board, which calculates the maximum amount of nonionizing electromagnetic radiation (NIER) which will be emitted from the proposed wireless telecommunications facility upon its installation and demonstrates that the facility will comply with the applicable federal or state standards.

### **§ XIII. NIER measurements and calculations.**

All applicants for wireless telecommunications facilities in any district shall submit calculations of the estimated NIER output of the antenna(s). For antennas mounted on an existing structure not requiring a special permit, the calculations shall be provided to the Director of Code Enforcement prior to the issuance of a permit. For antenna applications requiring a special permit, the calculations shall be provided to the Planning Board at the time of making the application for special permit. NIER levels shall be measured and calculated as follows:

1. Measuring equipment used shall be generally recognized by the Environmental Protection Agency (EPA), National Council on Radiation Protection and Measurement (NCRPM), American National Standards Institute (ANSI), or National Bureau of Standards (NBS) as suitable for measuring NIER at frequencies and power levels of the proposed and existing sources of NIER.
2. Measuring equipment shall be calibrated as recommended by the manufacturer in accordance with methods used by the NBS and ANSI, whichever has the most current standard.
3. The effect of contributing individual sources of NIER within the frequency range of a broadband measuring instrument may be specified by separate measurement of these sources using a narrow band measuring instrument.
4. NIER measurements shall be taken based on maximum equipment output. NIER measurements shall be taken or calculated when and where NIER levels are expected to be highest due to operating and environmental conditions.
5. NIER measurements shall be taken or calculated along the property lines at an elevation six feet above grade at such locations where NIER levels are expected to be highest and at the closest occupied structure.
6. NIER measurements shall be taken or calculated following spatial averaging procedures generally recognized and used by experts in the field of RF measurement or other procedures recognized by the FCC, EPA, NCRPM, ANSI or NBS.

7. NIER calculations shall be consistent with the FCC, Office of Science and Technology (OST) Bulletin 65 or other engineering practices recognized by the EPA, NCRPM, ANSI, MBS or similarly qualified organization.
8. Measurements and calculations shall be certified by a New York State licensed professional engineer, health physicist or a radio frequency engineer. The measurements and calculations shall be accompanied by an explanation of the protocol, methods and assumptions used.

#### **§ XIV. NIER monitoring and enforcement.**

1. The owner and/or operator of the antenna shall perform a NIER level reading as set forth above and shall submit the results of the test to the Town of Carmel Director of Code Enforcement Department within 90 days of initially operating the antenna system, and annually thereafter. The owner or operator shall provide a report from a qualified professional who shall certify, under penalties of perjury, that the installation does not expose the general public to NIER standards in excess of those of any federal or state agency regulating RIF-energy.
2. The Town may measure NIER levels as necessary to ensure that the federal or state standards are not exceeded. Any approval of a wireless telecommunications facility shall be conditioned upon an offer of perpetual consent to allow the Town access to the premises to conduct the required NIER monitoring, should the operator of the wireless communications facility fail to do so.
3. If the standards of any federal or state agency are exceeded at the location of a proposed transmitting antenna, the proposed facility shall not be permitted.

#### **§ XV. Bulk regulations and height.**

1. In all zoning districts, all wireless telecommunications facilities shall comply with yard requirements of the Zoning Ordinance for principal buildings. No wireless telecommunications facilities may be located between the principal structure and the street.
2. In residential districts, wireless telecommunications facilities shall not exceed 50 feet in height unless the requirements of Subsection 3 below are met. In nonresidential districts, wireless telecommunications facilities shall not exceed 100 feet in height unless the requirements of Subsection C below are met.
3. In the event that applicants propose a height greater than that listed above, the applicant must demonstrate to the satisfaction of the Planning Board that:
  - a. Alternative means of mounting the antenna have been considered and are not feasible for the applicant.

- b. The height is the minimum height necessary for adequate operation to meet the applicants' communications needs and the aesthetic intrusion has been minimized to the greatest extent practicable.
  - c. The height does not exceed 50% of the maximum height listed in Subsection 2. above.
  - d. The site or building on which the facility is proposed to be installed does not become nonconforming or increase in nonconformity by reason of the installation of wireless telecommunications facilities. This includes, but is not limited to, yard, buffer, height, floor area ratio for equipment buildings, parking, open space and other requirements. The height requirements of this chapter shall apply to buildings and equipment shelters.
4. Notwithstanding anything stated herein, the Planning Board shall be permitted to increase the height of any tower beyond any limitations set forth herein in order to accommodate additional users. In reviewing a request for greater height, the Planning Board shall balance the effect of a greater height against the provision of one or more additional towers, collocating or other alternatives.
  5. In residential districts, wireless telecommunications towers and monopoles shall be separated from residential buildings on adjacent or abutting properties for a distance by not less than two times the height of the tower or monopole. This provision shall apply to the proposed use for wireless telecommunications facilities of towers or monopoles existing at the time of adoption of this article.

#### **§ XVI. Visual impact.**

1. For all new wireless telecommunication facilities, the applicant shall provide to the Planning Commission a short Environmental Assessment Form (EAF), Part I and Visual EAF Addendum, Appendix A and B, including graphic information that accurately portrays the visual impact of the proposed facility from various vantage points selected by the Planning Board or the Planning Board's consultants, such as, but not limited to, residential areas, major commercial corridors, parks, historic buildings or scenic areas, including nighttime visual impacts. This graphic information may be provided in the form of photographs or computer-generated images with the tower superimposed, as may be required by the Planning Board or its consultants.
2. The applicant shall provide a temporary physical mockup of the proposed project. The mockup shall be mounted in the same location(s) at the project site as the proposed project and shall be the same dimensions, color and set at the same height and width as proposed project. The mockup shall be installed two (2) weeks prior to the initial appearance before the Planning Board, and shall remain in place until the Planning Board renders its decision on the application. The applicant shall obtain authorization for the installation of this temporary mockup from the Building Department, to ensure the mockup is installed safely, and does not represent a hazard to public safety. The mockup

shall be removed no later than two days after the close of the public hearing where the proposed project is considered.

3. For all buildings or equipment shelters to be located in a residential zoning district, the equipment shelter shall be treated in an architectural manner compatible with the residences in the vicinity.
4. Careful consideration of design details including color, texture, and materials shall be made to ensure the stealth design of the wireless telecommunication facility.
5. All building-mounted wireless telecommunication facilities shall be, at a minimum, designed as stealth facilities. Design techniques shall be employed to minimize visual impacts and provide appropriate camouflage.
6. All building-Mounted wireless telecommunication facility components, including all antenna panels, shall be painted or be designed to match the predominant color and/or design of the structure so as to be visually inconspicuous.
7. A minimum of three (3) live trees with a minimum height of 20-feet shall be planted in close proximity to a wireless telecommunications facility designed as a faux tree. The Planning Board may require additional live mature plantings to assist in mitigating visual impacts of wireless telecommunication facilities designed as faux trees.
8. Where a wireless telecommunications facility is proposed to be located on a building rooftop, the associated equipment shall be enclosed within an architecturally integrated penthouse or otherwise be completely screened to the satisfaction of the Planning Board. Required screening shall be decorative, of a design, color, and texture that is architecturally integrated with the building it is on.
9. Associated equipment shall be enclosed by a fence, landscaped screening decorative wall, or other screening and buffering measures found to be acceptable by the Planning Board.

#### **§ XVII. Color and lighting standards.**

Except as specifically required by the Federal Aviation Administration (FAA) or the FCC, antennas, including the supporting structure and all related appurtenances, shall:

1. Be colored to reduce the visual impact to the greatest degree possible.
2. Not be illuminated, except that buildings may use lighting required by the New York State Fire Prevention and Building Code or when required for security reasons. When lighting is used, it shall be compatible with the surrounding neighborhood to the greatest degree practicable.

#### **§ XVIII. Fencing and NIER warning signs.**

1. The area surrounding the facility shall:

- a. Be fenced or otherwise secured in a manner which prevents unauthorized access by the general public to areas where the standards of any federal or state agency are exceeded.
- b. Contain appropriate signage to warn of areas of the site where:
  1. NIER standards are exceeded.
  2. High risks for shocks or burns exist.
2. For wall-mounted antennas, the signage shall be placed no more than five feet off the ground.
3. No other signage, including advertising, shall be permitted at the facility, antenna or tower or supporting structure, unless required by law.

#### **§ XIX. NIER exposure standards.**

No antenna or combination of antennas shall expose the general public to NIER levels exceeding the standard of any federal or state agencies having jurisdiction. In addition, no antenna facility shall emit radiation such that the general public will be exposed to shock and burn in excess of the standards contained in ANSI C-95.1.

#### **§ XX. Registration of antenna operators.**

The Building Department shall keep a list of the names, addresses, type and maximum emissions of all antenna operators in the Town. This list shall be maintained from applications to the Planning Board and Building Department and from FCC or similar inventories of facilities in the Town. If the name or address of the owner or operator of the antenna facility is changed, the Building Department shall be notified of the change within 30 days.

#### **§ XXI. Expiration of special permit.**

1. The special permit shall be issued to the use that was the subject of the application and shall expire upon the termination of such use.
2. The Director of Code Enforcement shall require issuance of a revised or new special permit prior to the issuance of a building permit where the proposal requires a special permit use under this article.
3. After issuance of a building permit, the applicant shall provide a report to the Director of Code Enforcement prepared by a New York State licensed professional engineer certifying that any monopole or tower has been constructed in accordance with the plans approved by the Director of Code Enforcement.
4. All special permits issued for any wireless telecommunications facility shall be renewed every two years from the effective date of the approval of the facility. An application for renewal shall be made to the Planning Board. The Planning Board shall review any and

all changes in circumstances influencing the wireless telecommunications facility, or the actual facility itself, including its operation and use. If circumstances have materially changed, then the Planning Board shall reconsider the special permit approval. Failure to renew the special exception permit use, or the denial of the renewal by the Planning Board, shall result in the removal of the wireless telecommunications facility in accordance with this article.

**§ XXII. Existing installations.**

Any wireless telecommunications facility legally existing at the time that this article takes effect shall be permitted to continue, provided that the operator submits proof within six months of the enactment of this article that a valid building permit has been issued for the facility and that the facility complies with the standards adopted by the Federal Communications Commission and all requirements of this article, as certified by a professional engineer with qualifications acceptable to the Town of Carmel.

**§ 345-99. Severability.**

Should any section, paragraph, sentence, clause, word or provision of this article be declared void, invalid or unenforceable, for any reason, such decision shall not affect the remaining provisions of this article.